

# The **PLUG INTO** Solutions Network



**Learning**

**Education**

**Training**

**Leadership**

August 14 - 17, 2005  
Long Beach Convention Center, Long Beach, California

Workshop Sponsor



Workshop Co-Sponsors





Energy 2005 Schedule					
	Sunday	Monday	Tuesday	Wednesday	
5:30 a.m.			Fun Run/Walk		
6:00 a.m.					
6:30 a.m.					
7:00 a.m.					
7:30 a.m.		Networking Breakfast	Networking Breakfast in Exhibit Area	Networking Breakfast in Exhibit Area	
8:00 a.m.					
8:30 a.m.		<b>OPENING PLENARY</b>	<b>SESSION 4</b>	<b>SESSION 8</b>	
9:00 a.m.					
9:30 a.m.	Optional Technical Tours				Networking Break in Exhibit Area
10:00 a.m.		<b>SESSION 1</b>	<b>SESSION 5</b>	<b>SESSION 9</b>	
10:30 a.m.					
11:00 a.m.					
11:30 a.m.			Networking Lunch in Exhibit Area	Networking Lunch in Exhibit Area	<b>CLOSING LUNCHEON PLENARY</b>
12:00 p.m.					
12:30 p.m.		Optional Technical Tours	<b>SESSION 2</b>	<b>SESSION 6</b>	
1:00 p.m.					
1:30 p.m.					
2:00 p.m.			Networking Break in Exhibit Area	Networking Break in Exhibit Area	Agency Meetings
2:30 p.m.			<b>SESSION 3</b>	<b>SESSION 7</b>	
3:00 p.m.					
3:30 p.m.		Opening Networking Reception in Exhibit Area	Transition to Networking Event		
4:00 p.m.				Special Networking Event	
4:30 p.m.					
5:00 p.m.					
5:30 p.m.					
6:00 p.m.					
6:30 p.m.					
7:00 p.m.					
7:30 p.m.					
8:00 p.m.					

# The **PLUG INTO** Solutions Network

## Mark Your Calendars Now for Energy 2005!

*If you're involved in the facility energy management field or provide products and services to those who are, you should attend Energy 2005 - The Solutions Network. This is the industry's premier workshop and networking forum for federal energy managers and their private sector counterparts.*

Few industries in America are undergoing as many changes these days as the energy field. Are you ready for the challenges ahead? Government regulations, fuel shortages, new technologies, skyrocketing costs, and a host of other factors are combining to make your job even more difficult — and much more important — than ever before.

If you're interested in learning more about the best ways to do your job, finding out how your colleagues are dealing with energy problems, and understanding the options available to help you meet your facility's energy needs, then you need to attend this workshop. If your firm provides innovative energy products or management services, then networking at this federal workshop should be an essential part of your marketing strategy. You don't want to miss it!

This year's program builds on the successes of our previous workshops and offers the latest information needed by energy managers, procurement officials, engineers, utility representatives and others involved in this field.

- Energy 2005 presents more than 50 sessions on a wide variety of topics. Nearly 150 experts from around the country will be there to share their experiences, knowledge, and ideas. Energy 2005 will feature more than 100 exhibitors with the latest products, technologies, services, and strategies for energy savings in facilities like yours.
- Energy 2005 will offer special training designed for new energy managers as well as more advanced sessions on cutting-edge technical topics.

### AUGUST 2005

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<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

- Energy 2005 will arm you with the information and ideas you can take back to work and use immediately to help make your organization more energy efficient.
- Energy 2005 will bring together over one thousand energy professionals in an environment where you can share your concerns, needs, and goals. Find out first hand what others are doing to make their facilities even more efficient.

As always, this year offers a strong program at a great value. You'll hear some of the nation's top energy experts in stimulating plenary sessions and three days of powerful presentations by people who are on the line every day working on energy-saving projects. There's plenty of time on the schedule for you to talk with the trade show vendors about their products and services. Our exhibitors look forward to meeting with you!

Long Beach, California is a stunning beachfront community with big-city sophistication. You'll enjoy the mild August weather, the fun evening activities, and the many attractions of this oceanfront city.

Visit our website at [www.energy2005.ee.doe.gov](http://www.energy2005.ee.doe.gov) for the complete guide to this year's program. If you implement energy-saving programs in your agency or organization, you can't afford *not* to join us this August for Energy 2005. Make your plans now to join *The Solutions Network* and be part of the most informative and exciting annual venue in the energy field today!

## Learn from Our Distinguished Speakers!

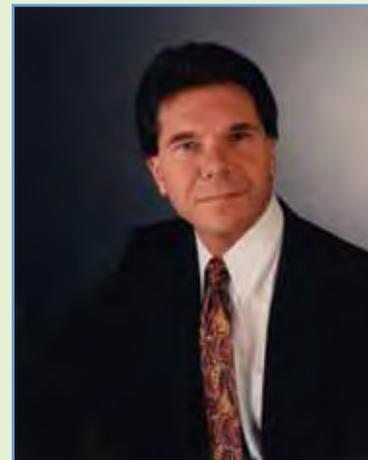
### Opening Plenary (Monday, 8:30 a.m. - 10:00 a.m.)

Our opening session will feature a presentation by the U.S. Army Corps of Engineers on its efforts to restore power in Iraq. This \$1.6B effort has forged successful government and commercial partnerships providing assistance to the Iraqi people in the rebuilding of their nation and identity. Come listen to a captivating account of experiences in the planning, design, and construction of power stations and transmission grids from the ground up against the backdrop of human interest, and in the midst of both terrorism and historic milestones.



### Closing Plenary (Wednesday, 12:00 p.m. - 2:30 p.m.)

Our closing session will provide valuable information and skills to help translate the new ideas learned at Energy 2005 into practice. In addition, you will learn techniques to assist in selling new projects both internally and externally for your organization.



Our keynote speaker is Dr. Robert Cialdini, Regent's Professor of Psychology at Arizona State University and author of the best seller, "Influence: Science & Practice." He has also taught at Harvard's Kennedy School of Government and Stanford University's Graduate School of Business. In the field of Influence and persuasion, Dr. Cialdini is the most cited social psychologist in the world today. His groundbreaking, evidence-based research resulted in the "six principles of influence."

## What You Need to Know About Energy 2005

**Who:** Since 1998, the U.S. Department of Energy's Federal Energy Management Program has sponsored an annual workshop for energy managers and others involved in saving energy in facilities. The U.S. Department of Defense and the U.S. General Services Administration are co-sponsors. The program has grown each year in number of sessions, exhibits, and attendees. Last summer in Rochester, New York, more than 1,400 attendees listened to dozens of presentations in eight technical tracks and visited more than 150 exhibit booths. Energy 2005 is shaping up to be even more spectacular with its location in the heart of Southern California and the strong program put together by the organizing committee.

**What:** This is the eighth annual national energy management workshop and exposition. Attendees include federal, state, local, and private sector energy managers, procurement officials, engineers and architects, energy

service companies, transportation officials, utilities, and others involved in energy management around the country. Here is your opportunity to learn about the latest cost-effective and most energy-saving renewable energy and water efficiency products and equipment. By applying the strategies, products, equipment, and services demonstrated at Energy 2005, you can improve the comfort, security, productivity, and reliability of your facility and employees.

**Where:** You'll appreciate the choice of Long Beach, California as the site of this year's workshop from the minute you get off your plane and feel the fresh ocean breezes. There are a number of renewable energy sites in the area, along with energy-efficient buildings and facilities. The workshop and exposition will be held at the Long Beach Convention Center in the heart of downtown, just 15 minutes from the Long Beach airport. Long Beach is also served by the Los Angeles International Airport

(LAX), which is 18 miles away. Hotel room blocks have been arranged at the federal government per diem rate of \$100, with three hotels located just minutes from the Convention Center: the Hyatt Regency Long Beach (888-591-1234 or 562-491-1234), the Renaissance Long Beach Hotel (800-468-3571 or 562-437-5900), and the Westin Long Beach (888-625-5144 or 562-436-3000). You can register directly with the hotels from the Energy 2005 website. Be sure to ask for the “Energy 2005” rate when making your reservation. Note that all three workshop hotels offer their guests free shuttle service from the airport. Call them from the special phones in the baggage area when you arrive in Long Beach.

**When:** The program begins with optional technical tours on Sunday, August 14, and an opening reception in the Convention Center Exhibit Area that evening at 5:00 p.m. It concludes at 2:30 p.m. on Wednesday, August 17, following the Closing Plenary Luncheon. This year’s training starts with a Monday morning opening session, product/service exposition through Tuesday, and 54 sessions in eight specialized technical tracks through Wednesday. There will also be several networking events and optional technical tours, as well as a number of optional pre- and post-workshop programs and special sessions. Check the website for full details on all activities.

**Why:** Energy 2005 is designed to help you do your job better by giving you cutting-edge training on the latest energy-saving strategies, products, and opportunities. Network with your colleagues to discuss new applications and strategies, and obtain information from the experts on successful case studies and projects.

**Cost:** The registration fee is \$465 for registrations postmarked by June 10 and \$565 after that date. There is also a special cost saving team discount of \$420 per person for groups of four or more from the same organization, postmarked by June 10. One-day registrations are available for \$365. The registration fee includes all sessions, breaks, two breakfasts and two lunches, social functions, handouts, and admission to the exposition.

**How to register:** An easy and secure way to register is online with a credit card on the secure website. You can also fax your registration form and credit card or other payment information or mail the form and payment information. If you have any questions or need more information, call Maddie Harwood toll-free at 800-608-7141, or email [energy2005@doeevents.com](mailto:energy2005@doeevents.com).

**For full information:** Full details on the sessions, special events, tours, and other activities, along with a list of frequently asked questions, are available at the workshop website: [www.energy2005.ee.doe.gov](http://www.energy2005.ee.doe.gov). Check this site often for information. Be sure to read the information on airline discounts for non-federal attendees, and other information for attendees. Most of your questions should be answered by looking through the website. You can call the Energy 2005 registration office toll-free at 800-608-7141 (Monday - Friday, 9:00 a.m. - 5:00 p.m. Eastern), or email [energy2005@doeevents.com](mailto:energy2005@doeevents.com) if you need more information.

For information on exhibiting at Energy 2005, contact Terry Peters toll free at 800-608-7141 (Monday - Friday, 9:00 a.m. - 5:00 p.m. Eastern), or email [terry.peters@doeevents.com](mailto:terry.peters@doeevents.com).



**Note:** The opinions and views expressed at the workshop and the optional workshop programs are not necessarily to be interpreted as official endorsement by the U.S. Department of Energy, U.S. Department of Defense, or the U.S. General Services Administration. Also, no representations, warranties or endorsements should be implied or inferred from the inclusion of a commercial/nonprofit entity in the product/services exposition.

## How to Convince Your Organization to Send You to Energy 2005

***In these days of scarce training dollars, you should expect a good return on your investment. Energy 2005 offers you enough benefits to justify your time and expense.***

Here are suggestions for getting your boss to approve your participation in our annual energy workshop. Follow these ideas for some help in getting the funding and approvals you need to join your colleagues at Energy 2005 this summer. Write a request to your supervisor and:

- Identify those sessions that will improve your job performance and benefit your organization.
- List sessions you want to attend and what you hope to learn.
- State how you plan to apply these to your organization's needs.
- Tell your supervisor your plan to share with your co-workers the valuable information contained in the sessions.
- Emphasize the low registration price compared to similar workshops elsewhere, and why Energy 2005 is a real bargain for a three-day workshop with more than 20 hours of training, cutting-edge technologies, and industry leaders as speakers. (The average cost of a three-day workshop and exposition often runs \$700 to \$1,000).
- Encourage the formation of agency teams to save additional dollars. Stress the advantage of team price discounts for four or more participants.
- Explain how a hands-on exposition, with suppliers of cutting-edge technology products, will benefit your organization.
- Show how the opportunity to view and learn about the latest energy products and services available will help you make the right procurement choices and meet energy goals.
- Present your request to attend, with this brochure, to convince your supervisor of the benefits of attending. Your organization can save even more money by registering early. Allow plenty of time to get your request through the approval process.

### Who attends these annual energy workshops?

More than 1,400 energy professionals came to Energy 2004 in Rochester, New York. Their job titles included federal, state, and local government and private sector energy managers; procurement officials; engineers; utility representatives; operations and maintenance managers; government contractors; environmental specialists; state energy office staff; architects; design engineers; facility managers, and others. Organizations included defense agencies; civilian agencies; industry; national laboratories; utilities; state and local governments; academia; institutes/associations; ESCOs, and media.

**“This is the single most important federal conference and trade show annually, and continues to become stronger every year.”**

*Jack DiEnna,  
Geothermal Heat Pump  
Consortium*

# The Energy 2005 Product/Service Exposition

Attendees will observe about the latest energy saving products and services. Exhibitors will have access to an interested and comprehensive federal and military market. To obtain exhibit information or to recommend a potential exhibitor, contact Terry

Peters toll free at 800-608-7141(Monday - Friday, 9:00 a.m. - 5:00 p.m. Eastern), or email [terry.peters@doeevents.com](mailto:terry.peters@doeevents.com). Updated exhibitor lists will be posted on the Energy 2005 website.

## Current / Prior Exhibitors

- 1E
- 1ST SOURCE LIGHTING
- A&K ENGINEERING CONSERVATION INC
- ADVANCED ENERGY SOLUTIONS LLC
- ADVANTEK CONSULTING INC
- AFFORDABLE HOUSING FINANCE
- AIR DAILY
- AIR FORCE CIVIL ENGINEER SUPPORT AGENCY (AFCEA)
- AIR STRATA MARKETING
- A-LERT ROOF SYSTEMS a DIV of CENTURION IND INC
- ALERTON INC
- ALEXANDER & EDWARDS PUBLISHING
- ALLIANT ENERGY INTEGRATED SERVICES
- ALLIED ENERGY SYSTEMS
- ALLIED WINDOW INC
- AMERESCO FED SOLUTIONS
- AMERESCO INC
- AMERICAN HONDA MOTOR CO INC
- APC - AMERICAN POWER CONVERSION
- APPLIED WATER TECHNOLOGIES INC
- ARMSTRONG SERVICE INC
- ASPEN SYSTEMS CORP
- ASSOCIATION OF ENERGY ENGINEERS
- AUTOMATED ENERGY INC
- AUTOMATED LOGIC CORP
- AVEDON DEVELOPMENT LLC
- AWEB SUPPLY
- B.I.G. MAN
- BALDOR ELECTRIC CO
- BASF CORP / SPRAY POLYURETHANES
- BAYVIEW TECHNOLOGY GROUP
- BEACON POWER CORP
- BEKAERT SPECIALTY FILMS
- BELIMO AIRCONTROLS
- BOSTONIA FED LEASING
- BUILDING GREEN INC
- BURNS & MCDONNELL
- C H GUERNSEY & CO
- CALIFORNIA HOME ENERGY EFFICIENCY RATING SYSTEMS
- CALLABRESI COMBUSTION SYSTEMS INC
- CALMAC MFG CORP
- CALPUTONE TURBINE CORP
- CARMANAH TECHNOLOGIES, INC.
- CATALYST POWER
- CENTRAL BOILER INC.
- CH2M HILL
- CHEVRON TEXACO
- CLEARWATER INC
- CLOUGH, HARBOUR & ASSC LLP
- CMS VIRON ENERGY SERVICES
- CO-ENERGY GROUP
- COMBINED ENERGIES
- COMFORT SYSTEMS USA
- COMMUNITY ENERGY INC
- CON EDISON SOLUTIONS
- CONCRETE SYSTEMS INC
- CONSTELLATION ENERGY
- CONTROLLED ENERGY CORP
- CONTROLTRON
- CONVERGE TECHNOLOGIES
- COPPER DEVELOPMENT ASSOCIATION
- DANFOSS TURBOCOR COMPRESSORS INC
- DEFENSE ENERGY SUPPORT CTR
- DEFENSE SUPPLY CTR PHILADELPHIA
- E3 DESIGNS
- EATON CUTLER - HAMMER BUSINESS
- EEMAX TANKLESS WATER HEATERS
- EMC ENGINEERS INC
- E-MON L P
- ENERGY & ENVIRONMENTAL TECHNOLOGY CTR @ ALBANY NANOTECH
- ENERGY BILLING SYSTEMS INC
- ENERGY CONCEPTS ENGINEERING P C
- ENERGY MANAGER BY LIFESPRING RESOURCES
- ENERGY SYSTEMS GROUP LLC
- ENERGY USER NEWS
- ENLINK GEOENERGY SERVICES INC
- ENVENERGY
- ENVIRONMENTAL BUILDING NEWS
- EPA / LMOP
- ESRI
- EV GLOBAL MOTORS CO
- FALCON WATERFREE TECHNOLOGIES
- FANTECH INC
- FARNSWORTH GROUP INC
- FED LABORATORY CONSORTIUM / MID-CONTINENTAL REGION
- FI-FOIL CO INC
- FIBERSTARS INC
- FIRST SECURITY LEASING INC
- FIRST SOLAR ELECTRIC
- FLIR SYSTEMS
- FORD MOTOR CO
- FORDY'S CHILLING FILTER CO
- FORE ENERGY
- FUEL CELL ENERGY INC
- GAS TECHNOLOGY INSTITUTE
- GAS UTILITY & PIPELINE INDUSTRIES
- GDK INTL INC/URIDAN
- GEO-MARINE INC
- GEOTHERMAL HEAT PUMP CONSORTIUM
- GLOBAL ELECTRIC MOTORCARS LLC
- GOETTL AIR CONDITIONING INC
- GOOD STEWARD SOFTWARE LLC
- GRAYBER ELECTRIC CO INC
- GREATER ROCHESTER ENTERPRISE
- GREENING AMERICA
- GSA / FED SUPPLY SERVICE / ENERGY CTR OF EXPERTISE / FED SUPPLY SERVICE / GENERAL PRODUCTS ACQUISITION CTR / GLOBAL SUPPLY GUARANTEED SYSTEMS INC
- GVI SECURITY dba SAMSUNG CCTV
- H.O.D. INC
- H20 APPLIED TECHNOLOGY
- HARDING ESE, A MACTEC CO
- HAWKER
- HEAT PIPE TECHNOLOGY
- HEAT TRANSFER PRODUCTS INC
- HEO ENERGY & DESIGN SERVICES
- HOLOPHANE
- HONEYWELL INTL
- HOWARD INDUSTRIES INC
- ICE ENERGY
- INGERSOLL RAND ENERGY SYSTEMS
- INST OF IRONWORKING INDUSTRY
- INTIRION / MICRO FRIDGE
- ITRON
- JESSUP MFG CO
- JOHNSON CONTROLS INC
- KMC CONTROLS
- KRAFT POWER CORP
- KREISS JOHNSON TECHNOLOGIES INC
- LAING THERMOTECH
- LAWRENCE BERKELEY NATL LABORATORY
- LECS WORLDWIDE LLC
- LEVITON MFG CO
- LIFESOURCE WATER SYSTEMS INC
- LIFESPRING RESOURCES INC
- LIGHTOLIER IGEN
- LIGHTSTAT INC
- LUDECA INC
- LUTRON ELECTRONICS
- MACTEC INC
- MAGNA DRIVE CORP
- McCONNELL ENERGY SOLUTIONS
- MCKENZIE BAY INTL LTD
- McNEIL TECHNOLOGIES INC
- MEASURING & MONITORING SERVICES INC
- METAL CONSTRUCTION ASSOCIATION
- METALOPTICS
- MIDPOINT INTL
- MODU-BUILT INDUSTRIES INC
- MODULIGHT INC
- MOONCELL USA
- MORGAN STANLEY
- MSC SPECIALTY FILMS INC / BEKAERT SPECIALTY FILMS
- MULTISTACK LLC
- NATIONAL ENERGY TECHNOLOGY LAB
- NATIONAL FENESTRATION RATING COUNCIL
- NATIONAL LIGHTING
- NATIONAL RENEWABLE ENERGY LABORATORY FEMP
- NATURAL LIGHTING CO INC
- NETWORK ENTERPRISES INC
- NEW YORK STATE ENERGY RESEARCH & DEVELOPMENT AUTHORITY
- NOESIS INC
- NOREN PRODUCTS
- NORESKO
- NORTHERN POWER SYSTEMS
- NORTHWEST ENERGY EFFICIENCY COUNCIL
- OAK RIDGE NATIONAL LABORATORY
- OBVIUS
- ONITY/SENNERCOM
- OPTIMUM APPLIED SYSTEMS
- OSRAM SYLVANIA
- PACIFIC NW NATIONAL LABORATORY
- PANASONIC VENTILATION & LIGHTING
- PATTERSON FAN CO INC
- PENTAGON ENERGY OFFICE
- PHILIPS LIGHTING CO
- PIPING TECHNOLOGY PRODUCTS INC
- PLATTS RESEARCH & CONSULTING
- POWER EFFICIENCY CORP
- POWER MEASUREMENT
- POWERGY, DIV OF ALCO ENGINEERING
- POWERLIGHT CORP
- PQ TESTING AND RENTALS INC
- PRAIRIELANDS ENERGY MARKETING INC
- PRINCETON ENERGY SYSTEMS
- PROATION SYSTEMS
- PROCURE NET / STRATEGIC PROCUREMENT SERVICES
- PROE POWER SERVICES
- PROFILE SYSTEMS LLC
- PROGRESS ENERGY SOLUTIONS
- RADIANT OPTICS INC
- RELION
- RESIENERGY INC
- REGENCY TECHNOLOGIES INC
- RELIANT ENERGY SOLUTIONS
- RF MACDONALD CO
- RKI INSTRUMENTS INC
- ROOFMART INTL INC
- RTP CO
- RWE SCHOTT SOLAR
- SAFE PASSAGE SYSTEMS CORP
- SANDIA NATIONAL LABORATORIES
- SATEC INC
- SCHOTT APPLIED POWER
- SCIENCE APPLICATIONS INTL CORP
- SEI GROUP
- SEIFERT & ASSOC / BERND TRENTOWSKI-INTERMARKETING
- SELECT ENERGY SERVICES INC
- SEMPRA ENERGY SOLUTIONS
- SEPCO - SOLAR ENERGY POWER CO
- SIEMENS AIRFIELD SOLUTIONS INC
- SIEMENS BUILDING TECHNOLOGIES INC
- SILICON ENERGY
- SIOUX STEEL CO / BOB SMITH SALES
- SOLAR ELECTRIC POWER CO - SEPCO
- SOLAR OUTDOOR LIGHTING INC
- SOLAR TURBINES INC
- SOLAR UNLIMITED INC
- SOURCEONE INC
- SOUTHERN CALIFORNIA EDISON
- SOUTHERN CO ENERGY SOLUTIONS
- SPEAKMAN CO / SPEAKMAN CRS
- SPIRAX SARCO INC
- SQUARE D CO
- STEELE CONTROL SYSTEMS
- STERLING PLANET
- STRATEGIC ENERGY
- STRATEGIC LIGHTING INC
- STRATEGIC MARKETING SERVICES
- STRATEGIC RESOURCE SOLUTIONS
- SUNWIZE TECHNOLOGIES
- SUPERIOR MFG DIV / MAGNATECH CORP
- SYSTEMS CORP
- TAC AMERICAS
- TAKE NOTE CO INC
- TAL-OP INC
- TANKLESS WATER HEATERS INC
- TBC CONFUELS
- TECHNICAL CONSUMER PRODUCTS INC
- TECO ENERGY SERVICES
- TENG & ASSC INC / TENG SOLUTIONS
- TETRA TECH EM INC
- THE ARK ENTERPRISES
- THE STEEL GROUP INC
- THE TRANE CO
- THERMO TECHNOLOGIES
- THERMO-LITE INC
- TIGER NATURAL GAS INC
- TOTAL BUILDING SOLUTIONS
- TOYOTA MOTOR SALES
- TRIATEK INC
- TRICOIL - SENSIBLE EQUIPMENT CO
- TRIDIUM INC
- TRIGEN DEVELOPMENT CORP
- TRISON CONSTRUCTION INC
- TRISTEM LTD
- TROX USA
- TURBOCOR
- U S ARMY CORP OF ENGINEERS, CEHNC-ED-ME-T
- U S DOE / BUILDING TECHNOLOGY / OWIP / BUYING ENERGY EFFICIENT PRODUCTS PROGRAM / CLEAN CITIES PROGRAM / EERE / ENERGY SMART PROGRAM / FEMP / FEMP BIOMASS SUPER ESPC / FREEDOMCAR & VEHICLE TECHNOLOGIES / OFFICE OF ADVANCE AUTOMOTIVE TECH / OFFICE OF INDUSTRIAL TECHNOLOGIES
- UNITED FINANCIAL OF ILLINOIS INC
- UNITED SOYBEAN BOARD
- UNIVERSAL LIGHTING TECHNOLOGIES
- URIDAN - USA
- USA TECHNOLOGIES
- UTILISAVE LLC
- VERDIEM (EZ CONSERVE)
- VERIS INDUSTRIES LLC / SQUARE D
- WAGO
- WARNER TECHNOLOGIES INC
- WATER FURNACE INTL INC
- WATER MANAGEMENT INC
- WATERLESS CO LLC
- WAY2GLO INC
- WESTINGHOUSE LIGHTING CORP / LIGHT MGMT SYSTEMS
- WFI GLOBAL
- WINDPOWER MONTHLY NEWS MAGAZINE
- WORLD ENERGY SOLUTIONS INC
- WWW GRAINGER
- WINDPOWER MONTHLY NEWS MAGAZINE
- XENERGY INC
- YORK INTL INC

## Specialized Training Tracks

### Effective O&M Solutions

#### ***Effective O&M: Time to give your program a check-up.***

Facility experts agree that significant energy and dollars can be saved through improved operations and maintenance (O&M) practices. While most O&M auditors/commissioning agents report a 5–15% efficiency improvement is achievable, savings as high as 30% have been reported. Furthermore, many of these savings require little capital investment but instead focus on strategies for doing more with existing staff and equipment. We will focus on the practical elements of an effective O&M program including, O&M 101, training, awareness, commissioning, controls, metering, resource efficiency managers, and new technologies. Come and learn from these O&M experts how to give your O&M program a check-up and then begin to reap the savings!

### Energy Project Financing Solutions

#### ***Get your energy projects funded here!***

Learn about available programs and authorized methods for implementing energy projects, including energy savings performance contracting (ESPC), utility energy services contracts, enhanced use leasing, utilities privatization and the DOD energy conservation investment program. Some of these options are more effective and appropriate for specific applications. Which are best for your energy projects? Find out how to apply lessons learned and partner with energy service companies to guarantee successful ESPC projects. Learn how to execute energy projects through utility company sponsored programs. Hear how enhanced use leasing and utilities privatization can provide solutions to your supply-side energy challenges. Experienced energy program managers will help you to better understand these programs and effectively apply these financing solutions to implement your energy projects.

### Leadership, Strategies, and Performance

#### ***Taking your energy management program to the next level.***

Where is your energy management program going? How will the future affect your program? Will you be reactive or proactive? In today's complex environment, it is imperative that energy managers develop effective leadership skills. Similarly, for energy management

programs to maximize their effectiveness, they require well thought out strategies that are developed, practiced, and sustained for measurable performance. These strategies must also be consistent with, and integral to, the organization's overall vision and mission. Our experts have demonstrated successful and effective leadership by applying proven goals, strategies and action plans. Come and learn how you can better manage your energy program.

### New Technologies for New Horizons

#### ***Discover the technologies that will help you exceed your energy goals.***

See and feel the future of energy efficiency technologies - from facilities to transportation. Join us as we peer into the future and examine, with a critical eye, new and emerging technologies that promise to save energy and improve your way of life, while avoiding black boxes and magical solutions. We'll show you the "toys" designed to advance your energy program. Find out when these technologies will be ready and if they can actually deliver on their promises. Experience these technologies being applied, learn how to avoid their limitations, and discover how to optimize their application. Join us as we pull back the curtain and expose the great and powerful Oz!

### Procurement Makes It Happen

#### ***All aboard the "Procurement Express."***

The "train" of energy price volatility has arrived. Your entire energy team will learn about innovative procurement strategies, energy efficient products and options available to help you speed along the track. Are there alternatives to what you've tried in the past? You had better know.



Learn from leading experts what those alternatives are. Should “Green” be part of your mix? Learn how to buy green tags and certificates. Are you on the supply side? Want to sell your energy products and innovative ideas to the government? Procurement officers with this valuable insight will tell you how to build a successful partnership. Learn how California officials buy energy. You can’t afford to be stuck in a seat on a runaway train.

## Renewables – Endless Energy

***Take home renewable concepts to save money, stabilize prices and protect the environment.***

Recent tax incentives will make renewable energy increasingly available at prices competitive with conventional power. Now is the time to tap into the abundant resources available for solar, wind and biomass energy, as well as begin using energy from the earth to heat and cool. We will discuss practical applications for on-site generation, as well as opportunities to purchase renewable energy for customers of all size. Don’t miss this opportunity to learn how to get on the renewable energy bandwagon now. You will be helping the environment and securing our energy future by reducing reliance on foreign energy imports.

## Secure Your Energy Future

***Design, Implement, and Manage Your Energy Security Program***

Is your energy future secure? Have you considered the tradeoffs and compromises necessary to make the best choices for your facility? Do you understand the energy markets and their effect on your supply, reliability and costs? Find out what is involved in creating and implementing an energy security plan. Improve the physical security of your energy assets, reduce your vulnerability, and shorten recovery time. Determine your true reliability requirements, associated costs, and explore options for addressing them. Explore the Combined Heat and Power (CHP) value proposition, pitfalls, technologies, and how to implement high-value projects. Protect your facility by applying California’s experience and their energy lessons learned. See available tools demonstrated, discover resources and learn where to get help.

**“Energy 2004 was one of the most eye-opening experiences I’ve ever encountered. The sessions were interesting and the tales that were told and solutions that were found were nothing short of amazing.”**

*Rita Pool,  
Pacific Northwest National Laboratory*

## Sustainability: Strategies for Success

***Integrating energy, economics, environment and quality of life into your organizations and projects.***

Learn the strategies to successfully program, design, construct, and operate a sustainable building. The application of sustainable development principles to building design, construction and operations has been a growing field for more than 10 years. The basic principles have stayed the same, but the experience base has grown and new technologies, strategies and tools have become available. Understand the value and challenges of rating systems such as the U.S. Green Building Council’s Leadership in Energy and Environmental Design (LEED®) and the U.S. Environmental Protection Agency’s Energy Star®. Find out how to use an integrated design process to select innovative technologies that work interdependently with a high return on investment. Discover the drivers, metrics and methods for measuring sustainable building costs and performance.

Descriptions of all workshop sessions are listed by track on pages 10-27. Visit the website for updated information.

**[www.energy2005.ee.doe.gov](http://www.energy2005.ee.doe.gov)**



## Sessions-at-a-Glance

Track	Effective O&M Solutions	Energy Project Financing Solutions	Leadership, Strategies, and Performance	New Technologies for New Horizons	Procurement Makes it Happen	Renewables - Endless Energy	Secure Your Energy Future	Sustainability: Strategies for Success
<b>MONDAY</b>								
10:30 a.m. - 12:00 p.m. <b>Session 1</b>	The Resource Efficiency Show		Energy Legislation and Federal Mandates	Energy 2005 Shoppers Network — E Toys for Energy Boys and Girls	Federal Acquisition of Energy Efficient Products, Supply and Services		Energy System Reliability: Keeping Mission Critical Functions Running	Feud or Happy Family - Sustainability Teams from Start to Finish
2:00 p.m. - 3:30 p.m. <b>Session 2</b>	Touch, Handle and Use: Hands-on Predictive Maintenance Technologies		Strategic Energy Management Planning (SEMP)	Facilities Latest & Greatest Energy Technologies	Procuring Green Tags and RECs		Energy Security Planning Basics	How LEED® and ENERGY STAR® Can Help You
4:00 p.m. - 5:00 p.m. <b>Session 3</b>	Training Facilities Professionals: Sorting through the Myriad Options		Know your Markets-Choose Wisely!	Alternative-Fueled Vehicle Test Track	California Energy Procurement		Balancing Trade-offs, Compromises, and Competing Issues	What the Energy Professional Needs to Know about Sustainability
<b>TUESDAY</b>								

8:30 a.m. - 10:00 a.m. Session 4	Better Metering for Better Management		Alternative Fuels: Learn What to Burn	Commodity Price Trends – Managing Your Risk	Renewable Energy – An Overview (101)	Distributed Generation/ Combined Heat and Power Headwind Issues: How to Hurdle the Roadblocks	Fact and Fiction of Sustainability Costs and Benefits
10:30 a.m. - 12:00 p.m. Session 5	Retro- Commissioning Tools and Measurement Techniques	How to Finance Your Energy Projects	Truth about Magic Solutions – The Good, the Bad & the Ugly		What the Experts Know About Renewable Energy Acquisition	Emergency Planning and Recovery	The H <sub>2</sub> O Show
2:00 p.m. - 3:30 p.m. Session 6	Jep-ergy Awareness, a Jeopardy-like Game	Partnering for Successful ESPC and UESC Projects	LED Technologies: For the Bright Future		Small and Intermediate Wind Opportunities Will Blow You Away	Utility Infrastructure – The Basics	Tool Time
4:00 p.m. - 5:00 p.m. Session 7	Facility System Integration: How to Optimize the Savings	Achieving ESPC Project Performance	Green Technology Puts More Green in Your Pocket		Save Energy and Dollars with Ground Source Heat Pumps	Energy Markets and Trends	Having It All – A Sustainable Business and Building
<b>WEDNESDAY</b>							
8:30 a.m. - 10:00 a.m. Session 8	Applying Best Facilities Management Practices	Alternative Financing Alternatives	Opening Your Building Control System: You be the Judge! — Round 2		Watt's Up With Solar Energy?	California Challenges & Solutions	Selling Sustainability to Your Roadblocks
10:30 a.m. - 12:00 p.m. Session 9	Data + Information = Smart Building	Utilities Privatization	You Can Benefit From Public Interest Research and Development		Beach Blanket Biomass	Physical Security of Energy Assets	Design Integration – How to Make it Happen!

**Monday, Session 1**  
**10:30 a.m. - 12:00 p.m.**

### The Resource Efficiency Show



**Intent:** Provide an update on the latest developments with the resource efficiency manager (REM) concept.

**Description:** One of our industry's most admired leaders will host a talk show covering the latest developments in the Resource Efficiency Management (REM) concept, which is rapidly proving to be a cost effective endeavor for all kinds of federal O&M programs. Celebrity guests will include a federal pioneer of this concept, a federal agency representative who is currently utilizing REM services, and two active REMs. There will be discussion, Q&A with the audience, even commercials highlighting federal-sector successes, but no PowerPoint! Come hear the latest news, have a few laughs and maybe even get on camera!

**Presenters:** Mark Ginsberg, Department of Energy; Dan Magro, Department of the Navy; Scott Wolf, Department of Energy; Joe Sabel, U.S. Coast Guard; Charles Howell, U.S. Army; Nancy Varner, Department of the Air Force

**Monday, Session 2**  
**2:00 p.m. - 3:30 p.m.**

### Touch, Handle and Use: Hands-on Predictive Maintenance Technology



**Intent:** Show up-close and hands-on how to apply predictive maintenance technologies.

**Description:** Observe demonstrations and try your hand at applying advanced maintenance approaches to keep your facility running more reliably and improve building performance. See how easy it is to use these predictive maintenance approaches at your facility to minimize downtime and manage operating expenses to a lower bottom line. Technologies to be showcased include infrared thermography, ultrasonic detection, vibration analysis and more. Learn easy-to-apply rules of thumb on when, where and how to apply predictive maintenance to optimize your operation by identifying problems before they happen. Take your facility to the next level of service by applying what you learn in this hands-on session!

**Presenters:** Claude Kane, Eaton Electrical; Jim Hall, Ultra-Sound Technologies

## Icons

Icons have been added throughout the session descriptions to help you plan a better workshop course curriculum that matches your personal needs and experience. By checking the icons, you'll have more information on the content and focus of the sessions.

## Audiences



**Energy 101**



**General Education**



**Advanced Education**

## Session Content



**California**



**Energy Surety**



**Facilities Management**



**Legal Issues**



**Show & Tell**



**Technical**



**Water**

**Monday, Session 3**  
4:00 p.m. - 5:00 p.m.

## Training Facilities Professionals: Sorting through the Myriad Options



**Intent:** Understand training formats for facility staff to best match the needs/goals of the learner.

**Description:** There is no shortage of training opportunities for facilities professionals. Offerings abound from classroom-based and hands-on training to in-house and online learning. How do you sort through the options for your professional development goals? To be effective, training must respond to unique needs of adult learners who bring life experience, busy schedules, distractions and expectations to the learning environment. We will introduce and facilitate open discussion for several components of an effective training program specific to facility operation and maintenance staff, resources available, and guidelines for selecting and implementing the appropriate program for your needs. Participants will gain a better understanding of how to select training formats through Discovery, Assessment, Selection, Procurement and Implementation that best match the needs/goals for themselves and their staff.

**Presenter:** Glin Jay, Sebesta Blomberg

**Tuesday, Session 4**  
8:30 a.m. - 10:00 a.m.

## Better Metering for Better Management



**Intent:** Provide overview of proven federal-sector metering techniques and an update on federal metering policy.

**Description:** Energy and water metering in the federal sector has long been neglected. Recent efforts have focused on applying metering to new construction while the preponderance of square footage is existing and un-metered. Our focus will include an update of federal metering policy, proposals for metering criteria, and highlight generic metering specifications for new and existing buildings. We will provide the pros and cons of different metering and communication configurations, as well as practical and replicable applications of metering in the federal sector. Come and learn the legislative, technical, and economic implications and benefits of metering in the federal sector.

**Presenters:** Jim Heller, Department of the Navy; Karlin Canfield, Department of the Navy; Jon Duke, Tetra Tech EM, Inc.

**Tuesday, Session 5**  
10:30 a.m. - 12:00 p.m.

## Retro-Commissioning Tools and Measurement Techniques



**Intent:** Highlight the application of readily available, easy-to-use, and inexpensive tools for commissioning existing facilities.

**Description:** Monitoring equipment is a valuable resource used during the retro-commissioning process. These small, simple and inexpensive devices can help facility staff understand the operation of their facility, a critical step toward improving building performance. Additionally, these data now become valuable in troubleshooting building operation and can assure the benefits of retro-commissioning persist. Come and receive an overview of building retro-commissioning, explanations of data logging and other monitoring tools, an interactive look at data logging equipment, discussions on the collection of accurate and meaningful data, and explore data graphing and analysis. Also, learn about tools and resources available through the California utility-sponsored tool lending library program. Upon completion you will have a good understanding of the capability and application of tools for building retro-commissioning.

**Presenters:** David Sellers, Portland Energy Conservation, Inc.; Ryan Stroupe, Pacific Gas & Electric

**Tuesday, Session 6**  
2:00 p.m. - 3:30 p.m.

## Jep-ergy Awareness, a Jeopardy-like Game



**Intent:** To “spread the gospel” of energy/water efficiency awareness as an effective part of O&M.

**Description:** Let’s play energy-awareness jeopardy! As a member of the studio audience, you’ll have the opportunity you’ve been waiting for to learn and show off your infinite knowledge of energy and O&M efficiency. Come learn and test your knowledge on a variety of topics, including: saving natural gas, maintenance cost reductions, electricity savings, operational efficiency, and more. And as you play, you’ll “win-win” all kinds of prizes, including awareness promotional materials you’ve only dreamed about. Who knows, you might enjoy it so much, you may not even realize you’re learning! Renewables for 300, please!

**Presenters:** Gil Siquedo, Department of the Navy; Cedreck Davis, National Aeronautics and Space Administration

*Continued*

## Effective O&M Solutions (continued)

**Tuesday, Session 7**  
4:00 p.m. - 5:00 p.m.

### Facility System Integration: How to Optimize the Savings



**Intent:** To highlight the benefits of integrating existing facility management systems.

**Description:** Most larger federal facilities make use of a variety of building operational systems including: HVAC, lighting, fire/life-safety, maintenance management, etc. Historically, these systems have operated autonomously and on proprietary platforms. Only recently has attention been given to the potential for energy and dollar savings by getting these systems to communicate; a classic example is the energy management and control system (EMCS) and the computerized maintenance management system (CMMS) link. Once made, this linkage allows for optimal maintenance to affect energy efficiency. Our focus will be to identify opportunities for greater integration of existing systems, understand the benefits and drawbacks, provide case studies, and how to determine the savings from these opportunities.

**Presenters:** John Sawyer, Johnson Controls, Inc.; Tia Henegan, Sebesta Blomberg

**Wednesday, Session 8**  
8:30 a.m. - 10:00 a.m.

### Applying Best Facilities Management Practices



**Intent:** To share best facilities management practices with a proven track record for extraordinary results.

**Description:** Jump on someone else's learning curve by viewing best performing, world class facilities. Take a virtual tour without leaving your seat of these special, award winning facilities that have won best in class rankings in a number of facilities and energy related benchmarking areas. The secrets of what separates the best in class from the rest of us will be revealed to help you take back proven and successful tools and approaches. Improvement strategies involving low cost with quick turnaround of results will be particularly emphasized and highlighted. Also, learn the facts and the basics of how to determine where you rank against top performing facilities organizations so you can determine the impact of employing best in class practices and strategies.

**Presenter:** Keith McClanahan, Facility Issues, Inc.

**Wednesday, Session 9**  
10:30 a.m. - 12:00 p.m.

### Data + Information = Smart Building



**Intent:** How to capture and analyze building systems information to implement an optimized energy management program.

**Description:** As direct digital control (DDC) and energy management systems (EMS) have become more ubiquitous in the building infrastructure, more and more data become available. This raw data is often discarded because of its volume and complexity. BACnet enables connectivity, thus providing a means of communication across different manufacturers' platforms for better availability and use of this valuable data. Learn what information is available in your building systems, how to use this information to make better decisions, how this can be applied regardless of the manufacturer, how this can improve your overall operations and maintenance strategies, and how this can lead to a continually commissioned facility.

**Presenters:** Jim Lee, Cimetrics, Inc.; Chris Hollinger, Siemens Building Technologies, Inc.

**"This was a great program that covered a broad range of helpful technologies."**

*Cedrick Davis,*  
NASA

# Energy Project Financing Solutions

**Tuesday, Session 5**  
10:30 a.m. - 12:00 p.m.

## How to Finance Your Energy Projects



**Intent:** Provide a general overview of several financing options and the pros and cons of each.

**Description:** We will provide you information on the various options for financing energy and utilities projects available to federal facilities and energy managers. You will also hear some lessons learned for these various financing approaches. Funding strategies to be discussed are: energy savings performance contracting, utilities energy services contracting, enhanced use leasing, financing through the Bonneville Power Administration and the DOD Energy Conservation Investment Program. These programs cover a wide range of applications and you are certain to find ones that fit into your energy management programs. Find out which of these solutions are best suited for financing your energy projects.

**Presenters:** Joyce Ziesler, Department Of Energy; Don Juhasz, U.S. Army

**Tuesday, Session 6**  
2:00 p.m. - 3:30 p.m.

## Partnering for Successful ESPC and UESC Projects



**Intent:** Present ESPC and UESC case studies and demonstrate how partnering leads to success.

**Description:** It takes many people to have a successful alternatively financed project. Understanding the expectations of all involved – who does what and when – is necessary to avoid conflict and possible unmet expectations. Collaboration and communication are key components to a project's success. We will hear from ESPC and UESC project managers how partnering and communication led to success. We will also hear about the latest developments in the federal ESPC program, and how collaboration with an experienced project facilitator is critical to meeting expectations in an ESPC project.

**Presenters:** Tatiana Strajnic, Department Of Energy; Paul Degner, U.S. Air Force; Manny Cabrera, National Aeronautic and Space Administration

**Tuesday, Session 7**  
4:00 p.m. - 5:00 p.m.

## Achieving ESPC Project Performance



**Intent:** To illustrate the need for sound savings measurement and verification to validate performance of an ESPC project.

**Description:** Energy Managers, do you feel like you've been talked into agreeing to a set of vague performance requirements? Energy Service Company representatives, do you feel like the government is creating new and unrealistic demands for validating saving in an existing contract? Do both parties understand who is clearly responsible for operation and maintenance? Panelists will discuss the adequacy of savings measurement and verification procedures in a sample project, their impact on cost, and how proper maintenance impacts the ability to meet savings guarantees. Learn what you need to know to ensure performance guarantees are met.

**Presenters:** Britta MacIntosh, Sempra Energy Services; Sharon Parshley, U.S. Navy; Bob Starling, Ameresco



*Continued*

## Energy Project Financing Solutions (continued)

**Wednesday, Session 8**  
8:30 a.m. - 10:00 a.m.

### Alternative Financing Alternatives



**Intent:** Provide information and case examples of lesser used financing alternatives.

**Description:** Learn how energy and facility managers have been successful in using some of the lesser used financing options to implement their energy projects. Hear how the Navy is using Bonneville Power Administration financing for their energy initiatives and how the Army is using enhanced use leasing to develop energy infrastructure. Learn how to take advantage of utilities energy service contracts offered by your utility provider, or how to pursue convincing them to develop a customized utilities energy service contract program for mutual benefit. These financing options may also be the solution to implementing your energy initiatives.

**Presenters:** Edward Thibodo, U.S. Navy; Erich Kurre, U.S. Army; Graham Parker, Pacific Northwest National Laboratory

**Wednesday, Session 9**  
10:30 a.m. - 12:00 p.m.

### Utilities Privatization



**Intent:** Provide status update and direction of the utilities privatization program.

**Description:** The Department of Defense is making an effort to privatize its utility distribution systems – transferring ownership and operation of those systems to private industry. DOD's target deadline for completing privatization initiatives is rapidly approaching. Hear about current privatization issues that impact your installations and find out what challenges they may create. Experienced defense and industry representatives will be on hand to help you learn where you can get help to meet your utilities privatization objectives.

**Presenters:** Capt. Richard Marrs, Department of Defense; McClellan (Bud) Harris, III, American States Utility Services, Inc.; Caitlin O'Leary, Defense Energy Support Center

**“This was one of the very best programs I have ever had the opportunity to visit.”**

*Michael Brown,  
U.S. Coast Guard*

# Leadership, Strategies, and Performance

**Monday, Session 1**  
10:30 a.m. - 12:00 p.m.

## Energy Legislation and Federal Mandates



**Intent:** To gain in-depth understanding of energy legislation and resulting policies and rules.

**Description:** Where does the energy legislation stand today and what does it mean to you? So many significant issues: new baselines, new goals, scorecards, facilities metering and sub-metering, to name a few. And let's not forget about the status of the ESPC authority. Plus, we'll talk about recent GAO reports on ESPC. There is a lot happening on the energy legislative and policy fronts. You will leave knowing how these issues are being addressed, how the legislation will alter federal agency reporting requirements, and, most importantly, how it will impact you and your organization.

**Presenters:** Get Moy, Department of Defense; Skye Schell, Department of Energy; Cynthia Vallina, Office of Management and Budget; Judy Blanchard, ChevronTexaco

**Monday, Session 2**  
2:00 p.m. - 3:30 p.m.

## Strategic Energy Management Planning (SEMP)



**Intent:** To share information of step-by-step design, development, and implementation of SEMP initiatives.

**Description:** Civilian and defense agencies of the federal government have recently initiated a comprehensive look at short-term and long-range policies, programs, and projects. Listen to the experts from GSA and Ft. Lewis Army Base discuss how to incorporate energy-efficiency, renewable energy technologies, sustainable building design and construction, operations & maintenance, and alternative financing into your strategic planning. This valuable information will help you in developing your vision, mission, goals and objectives in the areas of energy, environment, and sustainability outcomes and performance.

**Presenters:** Patrick D. Clark, General Services Administration; Terry Austin, Department of the Army

**Monday, Session 3**  
4:00 p.m. - 5:00 p.m.

## Know your Markets—Choose Wisely!



**Intent:** To gain insight into the “Competitive Markets” and know how to choose your next supplier.

**Description:** The energy industry we face today poses unprecedented challenges. Knowledge of the marketplace will lead to sound decision making. You will receive insight, and perhaps, a different perspective to meet the demands of your facility's energy needs. What is really needed for a competitive electricity market and how close are these restructured markets to being REAL competitive markets? What have we learned? Do you know what to look for when choosing a supplier? What should energy managers demand from their suppliers besides low price? How can you be sure to get what you need, or what you ask for? Get educated! This will give you the edge in competition for your next supply purchase.

**Presenter:** John A. Anderson, ELCON



## New Technologies for New Horizons

**Monday, Session 1**  
10:30 a.m. - 12:00 p.m.

### Energy 2005 Shoppers Network — E Toys for Energy Boys and Girls



**Intent:** To introduce the audience to the latest gadgets and technologies that will make “Saving Energy” easy.

**Description:** Come join this interactive taping of the “Energy Shoppers Network,” where the latest gadgets and technologies used to save energy or make saving energy easier and more fun will be demonstrated right before your eyes. Get up close and personal with the latest LED products as well as simple to use measurement and verification tools. This will be a one-of-a-kind display of “must have” items that every person who works in the energy conservation field needs to complete the job at hand, or just to impress your co-workers. Don’t forget to bring your credit card!

**Presenters:** Kate Blackmon, Lighting Science Inc.; Kevin Mills, ACR Systems, Inc.

**Monday, Session 2**  
2:00 p.m. - 3:30 p.m.

### Facilities Latest & Greatest Energy Technologies



**Intent:** Learn how to make it easier to save energy while operating a comfortable and productive facility.

**Description:** Join us for this new and exciting trip about facility management! Learn about the latest and greatest technologies for new construction and renovations, and see how, when and where they should be used. See the best in energy saving roofs and the hottest cooling techniques to get you the best available HVAC systems. We will learn about interesting projects/programs that have validated the energy saving potential of new technologies. Effective application of sophisticated technologies requires skilled facility managers who understand the latest capabilities and maintenance requirements. Be here to learn what you need to know to increase your skills and knowledge about Facilities Latest & Greatest.

**Presenters:** Lloyd Roberts, Colonel, Army National Guard; Don Beaty, DLB Associates; Don Eppelheimer, Trane Company

**Monday, Session 3**  
4:00 p.m. - 5:00 p.m.

### Alternative-Fueled Vehicle Test Track



**Intent:** To receive a hands-on learning experience with an innovative generation of vehicles.

**Description:** Let’s go for a ride! Virtually all petroleum imports are used for transportation fuels. Simply put, that means the only way for the United States to reduce its reliance on foreign oil is to reduce the consumption of petroleum used for transportation. Come see and learn about a new generation of vehicles designed to lead the way to energy independence. We’ll show you luxury SUVs and hybrid family cars, some exceeding 60 mpg. We’ll even show you sensible transportation that skips gasoline altogether, including the coolest electric motorcycles to legally hit the streets. Take a look at current vehicles and see what’s coming down the road. These may not be the flying cars we were promised from the 60,s but they are almost as cool!

**Presenters:** Scott Heyer, Toyota Motor Sales, U.S.A., Inc.; Rick Woodbury, Commuter Cars Corporation; Melisa Carroll, Hybrid Technologies

**Tuesday, Session 4**  
8:30 a.m. - 10:00 a.m.

### Alternative Fuels: Learn What to Burn



**Intent:** To learn the status as well as the future of hydrogen, bio-diesel and synthetic fuels.

**Description:** What will you burn when the world runs out of recycled dinosaurs? What can you use to warm your building but not your planet? Get the latest information on clean, environmentally friendly fuels and how to use them. Can we really replace black gold or Texas tea with something that smells like French fries? Learn what bio-diesel, hydrogen and synthetic fuels are, how they are produced, and how they can be used. Is there a hydrogen highway in your future? Find out what the technical challenges of utilizing each fuel are as well as the economics and the future in the federal government of each fuel. Hear the most recent as well as pending alternative fuels rules and legislation.

**Presenters:** Lindsey Hicks, Department of Defense; Leo Grassilli, Department of the Navy; William Harrison, Department of Defense.

**Tuesday, Session 5**  
10:30 a.m. - 12:00 p.m.

## Truth about Magic Solutions – The Good, the Bad & the Ugly



**Intent:** To provide insight about new products and additives guaranteed to reduce building energy consumption.

**Description:** Dispel the anxiety you get from the questionable effectiveness of new products introduced by marketers that promise to reduce energy at your facilities. Find answers to your questions and ready yourself to make rational decisions about new products. Learn the mystery of black boxes that harmonize. Hear the truth about magic solutions that claim to save energy in equipment operation. Learn about a revolutionary new way to generate power by using slow moving traffic. Find out if ice storage is a viable energy saving opportunity. Learn about vanadium reduction batteries and how they can be used for energy savings.

**Presenters:** Rob Barchyn, Celerity Power; Terry Kenny, Alternative Energy Sources Technologies, Inc.; Mark T. Kuntz, VRB Power Systems, Inc.; Mark M. MacCracken, CALMAC Manufacturing Corporation

**Tuesday, Session 6**  
2:00 p.m. - 3:30 p.m.

## LED Technologies: For the Bright Future



**Intent:** Discover the current and future applications of the fastest evolving lighting technology – Light Emitting Diodes.

**Description:** Come see and hear about the fastest evolving lighting technology – Light Emitting Diodes (LEDs). Take a look at the latest LED products available on the market today – street lights, signal devices, down lights and many more. Learn from the experts about the various applications available for current and future markets. Understand the overall energy and maintenance benefits being obtained, as compared to more traditional lighting technologies, and also how to properly apply this technology for retrofit and new construction applications.

**Presenters:** Gary Durgin, Dialight Corporation; Fred Maxik, Lighting Science Group Corp.; Patrick Mullins, Power Specialty Group, Inc.

**“I was exposed to a wide range of energy technologies, expert presentations, and an overwhelming source of information.”**

*Stephen Labas,  
U.S. Geological Survey*

**Tuesday, Session 7**  
4:00 p.m. - 5:00 p.m.

## Green Technology Puts More Green in Your Pocket



**Intent:** To highlight innovative “green” technologies that are being incorporated into sustainably designed buildings.

**Description:** Sustainable building designers have been selecting innovative technologies to meet their aggressive design goals. When innovative technologies enter the market, it can take a few test runs to make sure they perform as advertised. Learn about Green Roof design strategies and a new water conservation technology. Do you have roof top space that could be used to reduce your storm water runoff and your energy bill? New research findings, latest designs, implementation techniques, and green roof products will be shared. Have you ever wondered why we use potable water to flush our toilets? A new technology that reuses sink water for toilet use will be shared. This is your opportunity to ask how these technologies could be applied to your facilities for operational success.

**Presenters:** Paul Kephart, Rana Creek Habitat Restoration; Mark Sanders, Barnacle Water Saver, LLC

*Continued*

## New Technologies for New Horizons (continued)

**Wednesday, Session 8**  
8:30 a.m. - 10:00 a.m.

### Opening Your Building Control System: You be the Judge! — Round 2



**Intent:** A look at “open” control systems and the benefits of “opening” up your control system.

**Description:** In our last round, we learned what BACNet, LonWorks, ModBus, OPC, Soap, and XML meant. With all the hype, bounding around, and battles, what does it all mean to you and what are your benefits? Round 2 will help you understand the difference between hype and reality when it comes to open systems. Experts in the open systems world will lead you down the right path as we explore the world of open control systems. You’ll learn the benefits and pitfalls associated with migrating your closed control system to one that is truly open. In addition, you’ll learn the correct way to “open up” your control system to get exactly what you want.

**Presenters:** Bob Schultz, TAC Americas; Phil Edwards, U.S. Postal Service

**Wednesday, Session 9**  
10:30 a.m. - 12:00 p.m.

### You Can Benefit From Public Interest Research and Development



**Intent:** To gain knowledge and experience from public research, development and deployment programs.

**Description:** Public interest energy research programs, such as the California PIER program, support energy research and development designed to bring new environmentally safe, affordable and reliable energy services and products to the marketplace. These programs include a full range of research, development, and demonstration activities that are advancing technology not adequately supported by competitive and regulated markets. The goal is to develop technologies, strategies and tools that will help you manage energy costs and consumption more effectively. While there are several similar programs across the country, California operates one of the largest. Regardless of where you live and work, you can benefit from these programs and their findings. Come and hear a few success stories and see how you can benefit from these new technologies.

**Presenter:** Nancy Jenkins, California Energy Commission

**“Over my 25+ years of facilities management, I find the Energy 200X workshops to be the most comprehensive, and provide the best information to accomplish energy management successfully.”**

*Robert Mitchell,*  
**NASA**

# Procurement Makes it Happen

**Monday, Session 1**  
10:30 a.m. - 12:00 p.m.

## Federal Acquisition of Energy Efficient Products, Supply and Services



**Intent:** Discover the products, services and supplies that DLA and GSA provide.

**Description:** Learn how DLA and GSA can help you lower your energy costs, satisfying federal agency mandates. You will gain the information necessary to choose the program that best fits your needs. Meet the key people who will guide you and offer options that will help you as you proceed down the track to a successful energy purchase for your facility. If you're an energy/facility manager or an agency-contracting/procurement official, you must be here!

**Presenters:** Mark Ewing, General Services Administration; Kevin Ahern, Department of Defense; Steven J. Harris, Department of Defense; Sandy Tatum, General Services Administration, Federal Supply Schedule

**Monday, Session 2**  
2:00 p.m. - 3:30 p.m.

## Procuring Green Tags and RECs



**Intent:** Introduce the procurement options available for the purchase of renewable energy to meet energy goals.

**Description:** Now that you are receiving ever increasing pressure to commit to purchasing renewable energy, where on earth do you start and who do you go to to make it happen? Facilities, energy and procurement managers – let us give you tips, tools and information showing you how GSA and DOD can assist you. Learn about renewable energy certificates (RECs) and how to purchase green power. Learn about the major green power technologies and strategies for procurement of green power and methods for evaluating green energy opportunities.

**Presenters:** John Nelson, Department of Defense; Steve McDougal, Three Phases; Ken Shutika, General Services Administration

**Monday, Session 3**  
4:00 p.m. - 5:00 p.m.

## California Energy Procurement



**Intent:** To share information on California energy procurement success stories and legislative proceedings and programs.

**Description:** Do you remember the California energy crisis and industry debacle? With time and distance we can now learn from what happened. What does the California energy market look like today? Industry and government representatives will provide information and respond to your questions and concerns, in addition to offer information applicable to those of you in other areas of the country. Learn how California officials buy energy. Learn how the state's resource adequacy process affects your programs. Experts will provide techniques, ideas, and strategies that you can take back with you to your facilities.

**Presenters:** Mark Levi, General Services Administration; Chuck Goldman, Lawrence Berkley National Laboratory

**Tuesday, Session 4**  
8:30 a.m. - 10:00 a.m.

## Commodity Price Trends – Managing Your Risk



**Intent:** Provide insight into the factors that move the markets for power and natural gas.

**Description:** Everyone has observed how volatile the price of energy has been over the last year or so. Many factors are cited to account for this roller coaster ride we have witnessed. While psychology clearly plays an irrational role, affecting price peaks and valleys, other price-influencing factors are more definable and rational. Budgetary constraints alone insist that you stay up-to-date and informed. You can't "time" the market, so it's vital that you have the best information available to make an informed decision when it comes time to spend energy dollars wisely. Understand supply/demand balance and what's happening with gas and power prices. Learn how global energy issues impact on the domestic market. Hear what the experts think the short- and long-term implications will be.

**Presenters:** Steve Kiesner, Edison Electric Institute; Bert Wilson, South River Consulting

## Renewables - Endless Energy

**Tuesday, Session 4**  
8:30 a.m. - 10:00 a.m.

### Renewable Energy—An Overview (101)



**Intent:** To familiarize participants with the universe of renewable energy opportunities.

**Description:** This fast-paced look will cover a wide variety of renewable options open to the innovative energy manager. We will discuss how to choose one that meets your needs. We will briefly cover some purchasing ideas and on-site renewables, including solar technologies, wind energy approaches, biomass concepts, and some surprises. We will also identify where the renewable sources are most available, touch on economics including state and local incentives, and point you to resources that will help you turn concept into reality.

**Presenters:** Lisa Frantzis, Navigant Consulting, Inc.; Andy Walker, National Renewable Energy Laboratory

**Tuesday, Session 5**  
10:30 a.m. - 12:00 p.m.

### What the Experts Know About Renewable Energy Acquisition



**Intent:** Provide concepts to acquire renewable energy for both the large and small energy user.

**Description:** DOD recently completed a study to find ways to improve its use of renewable energy. Find out what they learned and where the best bang for the buck may be in acquiring renewables. You don't need a uniform to learn about renewable purchasing strategies and which states may be HOT! If you live in a state where there is no wind or solar capability (especially the Southeast), you may be interested to learn that biomass has tremendous potential. Next learn how the Defense Energy Support Center has successfully purchased renewable attributes (Green Tags) at prices so low the cost is almost negligible. If you are interested in acquiring renewable energy at competitive prices, these presentations are a must.

**Presenters:** Alvin Day, Department of the Air Force; Mike Warwick, Pacific Northwest National Laboratory; John Nelson, Defense Energy Support Center

**Tuesday, Session 6**  
2:00 p.m. - 3:30 p.m.

### Small and Intermediate Wind Opportunities Will Blow You Away



**Intent:** Show how on-site wind generation can save money, boost energy security and help the environment.

**Description:** Discover the wealth of opportunities to leverage wind resources to reduce energy costs while helping the environment. See what many farmers and small businesses already know about harnessing the wind to their advantage. We will concentrate on equipment in the 5kW to 750kW range, and will provide examples of successful projects including cost data you can use for planning purposes. Learn about site selection, resale strategies, protection from blackouts and much more.

**Presenters:** Mike Bergy, Bergy Windpower Company; Gary Seifert, Idaho National Engineering and Environmental Laboratory

**Tuesday, Session 7**  
4:00 p.m. - 5:00 p.m.

### Save Energy and Dollars with Ground Source Heat Pumps



**Intent:** To educate the audience how ground source heat pumps can be installed anywhere.

**Description:** Hear Dr. Fill counsel a distraught energy user on ways to save energy, money and maintenance costs by using ground source heat pumps for heating and cooling. Dr. Fill will cover typical applications: how these systems will work in their facilities and how to have them installed with all different existing heating, ventilation and air conditioning systems. Bring your questions and Dr. Fill will answer them free of charge. Afterward, he will happily provide complimentary clinical services if you need more information.

**Presenters:** Steve Ganzer, Tetra Tech EM, Inc.; Barbara Watts, Slim Jim, Inc.

**Wednesday, Session 8**  
8:30 a.m. - 10:00 a.m.

## Watt's Up With Solar Energy?



**Intent:** To showcase various solar energy technologies emphasizing economics and other benefits.

**Description:** Solar technologies are not just for spacecraft anymore. They are down to earth and in applications all across the globe. If you want to save money and provide reliability and security to your operation, don't miss this opportunity. We will describe the latest solar technologies on the market and tell you how you can get them and use them. Don't think you have enough sun? Come anyway and learn about daylighting techniques and transpired heat collectors that can temper fresh air in cold climates, even the Arctic. We'll have lots of examples of projects, costs and paybacks to tweak your interest.

**Presenters:** Roch Ducey, Department of the Army; Dave Menicucci, Sandia National Laboratory; Ellen White, Guaranteed Systems, Inc.

**Wednesday, Session 9**  
10:30 a.m. - 12:00 p.m.

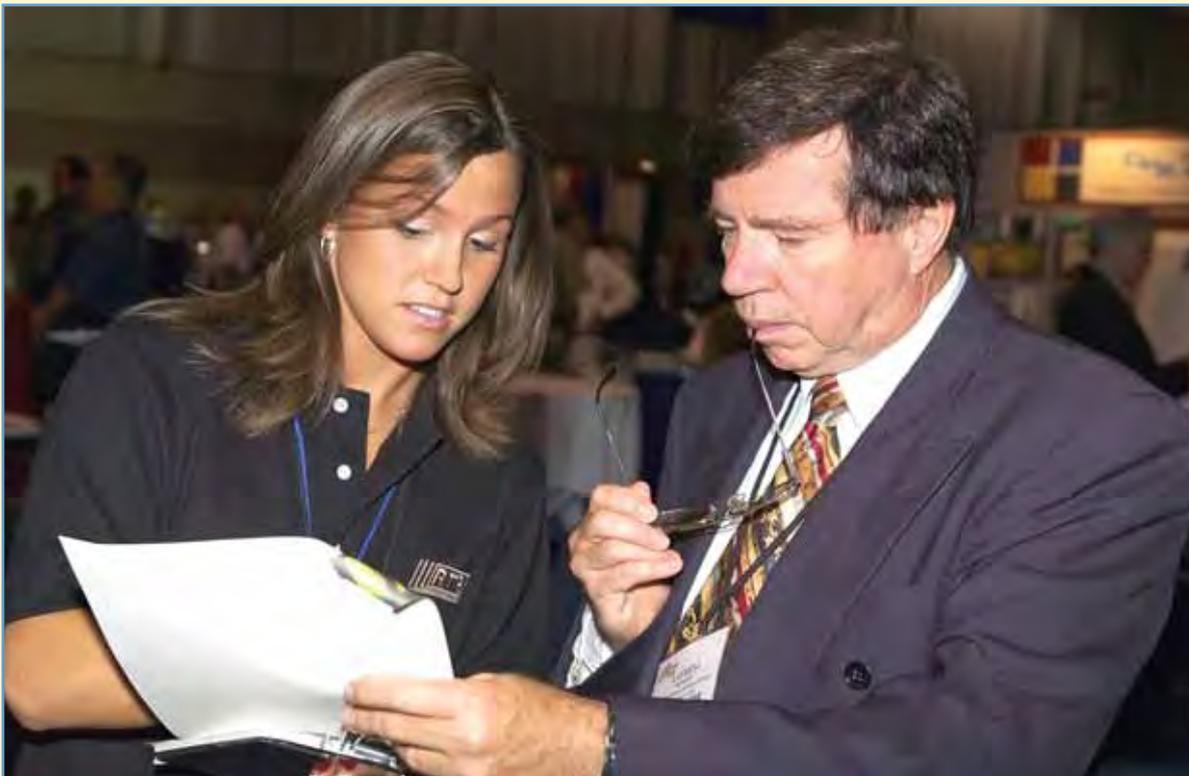
## Beach Blanket Biomass



**Intent:** To introduce the many fuel types, technologies and benefits of biomass to energy projects.

**Description:** Join us for an informative but entertaining overview of the world of biomass energy. We'll introduce you to biomass resources from such traditional ones as landfill gas, digester gas, and woodwaste, to the more exotic. You'll get the basics on equipment options, engineering rules of thumb and how reduced fuel costs and price stability drive economics. Learn of benefits such as energy security, reduced environmental emissions and less dependence on foreign fuels. Hear about successful applications and the special challenges biomass to energy projects must wrestle with, such as right of ways, environmental permitting, and utility interconnections. Try to stump the experts to win "fabulous" prizes and plant a seed for a biomass project that could soon be sprouting up at your facility.

**Presenters:** Christopher Abbuehl, Department of Energy; John Stewart, Department of Interior; Brian Guzzone, Environmental Protection Agency



# Secure Your Energy Future

**Monday, Session 1**  
10:30 a.m. - 12:00 p.m.

## Energy System Reliability: Keeping Mission Critical Functions Running



**Intent:** Identify and prioritize your true reliability requirements and costs; explore options to address those needs.

**Description:** What will you do when the power goes out? Are your critical systems protected in case of an outage? Can your mission critical functions continue when the next hurricane or tornado hits? Are you sure what functions are “mission critical?” If we’ve got you wondering whether or not you are adequately prepared, come hear what our experts have to say about the reliability of energy systems, and how you can improve reliability without “mortgaging the farm.” This session will touch on all energy systems, but will concentrate on electricity — the system most likely to fail and create the most havoc when it does.

**Presenters:** Andrew Nebbs, EYP Mission Critical Facilities®, Inc.; Tom Key, EPRI Solutions, Inc.; David Menicucci, Sandia National Laboratories

**Monday, Session 2**  
2:00 p.m. - 3:30 p.m.

## Energy Security Planning Basics



**Intent:** Understand the dynamics dictating the why, what, and how of creating an Energy Security Plan.

**Description:** Energy disruptions can happen via a myriad of occurrences. Are you prepared for these potential disruptions? Before an Energy Security Plan can be developed, an understanding of the dynamics of this emerging priority must be realized. What are the requirements for a complete Energy Security Plan? What legislative, regulatory, and policy issues must be considered in developing the plan? Come and gain an understanding of the overall picture of this emerging and high priority arena. Learn how your facility fits into the Energy Security picture and what is needed to develop a plan that will assure a high degree of readiness and reliability.

**Presenters:** Joan Glickman, Department of Energy; James Paton, U.S. Army; Mark Ewing, General Services Administration

**Monday, Session 3**  
4:00 p.m. - 5:00 p.m.

## Balancing Trade-offs, Compromises, and Competing Issues



**Intent:** Debate the trade-offs of energy security, cost reductions, efficiency improvements, and program goals.

**Description:** Do you often have to make choices between conflicting issues? Do your energy security needs often conflict with your energy efficiency goals? Can you balance cost reductions with renewable and green initiatives? Experts will discuss the overlap and disconnects between competing programs and provide insight into gaining the best solution for your facility. Gain a better understanding of the balanced solutions required to meet the seemingly opposing requirements of energy security, energy efficiency, renewable energy, and cost reductions.

**Presenters:** Gary M. Fechter, Princeton Energy Systems; Steve Gabel, Honeywell Laboratories

**Tuesday, Session 4**  
8:30 a.m. - 10:00 a.m.

## Distributed Generation/Combined Heat and Power Headwind Issues: How to Hurdle the Roadblocks



**Intent:** Learn about implementation roadblocks, how to mitigate them, and emerging packaged systems that present solutions.

**Description:** Are you currently having problems implementing your distributed generation (DG) or combined heat and power (CHP) projects? Do you feel like you are fighting against a headwind as you work your way through the process? Do you ever wonder why DG/CHP installation can't be more simple? Hear experts from the EPA CHP Partnership and the DOE CHP Regional Application Centers speak on the most prevalent headwind issues, solutions for resolving these issues, and tools that help you work through the implementation process. Learn from an industry expert about the pros and cons of packaged DG/CHP systems as an innovative way of installing a CHP System.

**Presenters:** Louis Troche, U.S. Environmental Protection Agency; Leslie Farrar, Energy Resources Center of UIC; Jan Berry, Oak Ridge National Laboratory

**Tuesday, Session 5**  
10:30 a.m. - 12:00 p.m.

## Emergency Planning and Recovery



**Intent:** Relate experiences and provide recommendations on recovering from blackouts and other loss of service events.

**Description:** What is your weakest link? When loss of service happens, do you have a recovery plan? Protection is only half the solution. Recovery demands timely reaction from first responders, utilities, and facility managers. Hurricanes in 2004 dealt a devastating blow to Florida power grids. Southern California firestorms destroyed thousands of homes and crippled the power distribution system. The northeastern grid blackout of 2003 devastated transportation systems. Come get the real story of how others responded and how you can protect your energy systems from natural and man-made vulnerabilities.

**Presenters:** Scott Drury, San Diego Gas & Electric; Eric Fuller, Jet Propulsion Laboratory; Brian K. Magden, General Services Administration

**Tuesday, Session 6**  
2:00 p.m. - 3:30 p.m.

## Utility Infrastructure – The Basics



**Intent:** Understand how electric and gas systems work, and their impact on security, reliability, and cost.

**Description:** Have you ever wondered what exactly a utility grid is? What's all this about power pools and power authorities? What exactly is involved in natural gas transmission and distribution? What does it mean and how does it affect me in my decision-making related to the energy security and reliability at the facility level? Shatter the myths around natural gas and electricity distribution systems reliability and vulnerabilities. Obtain a behind the scenes look at the delivery systems that we all take for granted. Industry experts will provide a basic primer on electricity and natural gas systems. What they are. What they mean. How they could/should affect the energy decisions you make.

**Presenters:** James J. Sebesta, Sebesta Blomberg & Associates, Inc.; William F. Hederman Jr., Federal Energy Regulatory Commission; N. Richard Friedman, Power Reliability and Security Council

**Tuesday, Session 7**  
4:00 p.m. - 5:00 p.m.

## Energy Markets and Trends



**Intent:** Provide industry perspectives on trends in global energy markets and impact on U.S. energy costs.

**Description:** What do the rising oil prices mean? What is their real effect on the costs of energy? What should you look for when planning your energy budget? What trends will affect your cost of energy? What is the true effect of global market trends on your energy costs and which trend should you track? Recent prices and forecasts have Energy Managers for federal and privately held facilities asking these questions and more. This session provides the opportunity to listen to what “Industry Insiders” have to say about the current global energy markets, future trends, and their affect on your cost of doing business.

**Presenters:** Douglas A. Oglesby, Chevron Energy Solutions; Thomas J. Woods, Platts Research & Consulting

**Wednesday, Session 8**  
8:30 a.m. - 10:00 a.m.

## California Challenges & Solutions



**Intent:** Showcasing the unique and innovative ways California is meeting energy challenges and goals.

**Description:** For good reason, California has been described as a “unique” place. Keeping with its reputation as green and progressive, California provides financial incentives to install photovoltaic (PV), distributed generation, and combined heat and power systems. On the other hand, just try to get a permit, or put PV anywhere near a historic (50 year old) structure. Or even run a natural gas line to the site (because no other fuel is permissible). Hear the challenges and solutions from people who know.

**Presenters:** Daryl Mills, California Energy Commission; Robert Redlinger, Chevron Energy Solutions; Ray Levinson, U.S. Postal Service

*Continued*

## Secure Your Energy Future (continued)

**Wednesday, Session 9**  
**10:30 a.m. - 12:00 p.m.**

### Physical Security of Energy Assets



**Intent:** Understand available techniques and equipment to maintain and physically protect your utilities.

**Description:** Learn from industry and agency experts how to protect and monitor your energy assets. Understand the methods and equipment that are available today to assist with the physical security of your utility production, supply, transmission, distribution and storage systems. Learn the innovative methods being used to balance force security with the need to maintain and deliver reliable electricity, heat, water and other utility services to your facility.

**Presenters:** Leon Snyman, GVI Security, Inc.; Roni Kass, ioIMAGE, Ltd.

**“This workshop is important in that it brings together a broad spectrum of the energy industry with representatives of the various agencies of the federal government...the largest energy consumer in the Nation...to discuss the critical issues and to come up with future solutions.”**

*Dr. Get Moy,  
U.S. Department of Defense*



# Sustainability: Strategies for Success

**Monday, Session 1**  
10:30 a.m. - 12:00 p.m.

## Feud or Happy Family — Sustainability Teams From Start to Finish



**Intent:** To provide sustainable building stories from the planning stage to occupancy.

**Description:** Now that sustainable design is more mainstream, some find it relatively easy to plan and design a facility, but when it comes to construction, everything falls apart. Others have challenges during the operation of a beautifully designed and constructed building. And yet still others blame lower than expected building performance and satisfaction on the building occupants. In the style of a familiar game show, two building “families” including planners, designers, construction, commissioning, building managers, and occupants, will share their experiences on how to be successful through teamwork. Learn from these sustainability teams what their greatest challenges were and how they turned those challenges into successful sustainably designed and operated buildings.

**Presenters:** Andrea Ramage, CH2MHill; Bucky Green, U.S. Environmental Protection Agency

**Monday, Session 2**  
2:00 p.m. - 3:30 p.m.

## How LEED® and ENERGY STAR® Can Help You



**Intent:** To clarify the similarities and differences between the LEED® and ENERGY STAR® building rating systems.

**Description:** The U.S. Green Building Council (USGBC) is a national, non-profit organization with a voluntary, diverse membership. The USGBC developed the Leadership in Energy and Environmental Design (LEED) rating systems in response to the U.S. market’s demand for a definition of “green buildings.” The U.S. Environmental Agency developed ENERGY STAR as a government-backed program helping businesses and individuals protect the environment through superior energy efficiency. ENERGY STAR was introduced as a voluntary labeling program designed to identify and promote energy-efficient products to reduce greenhouse gas emissions. Gain a better understanding of these programs and learn how they may assist you in identifying best practices, and building and maintaining sustainable buildings.

**Presenters:** Caterina (Katy) Hatcher, U.S. Environmental Protection Agency; Tom Hicks, U.S. Green Building Council

**Monday, Session 3**  
4:00 p.m. - 5:00 p.m.

## What the Energy Professional Needs to Know about Sustainability



**Intent:** To identify the “LEED”ing energy design techniques and technologies for sustainable design.

**Description:** When talking with energy professionals, questions frequently asked about sustainable design or the LEED® Rating System include: Does sustainable design, especially the LEED rating system, put sufficient emphasis on energy efficiency? How do I identify the synergies between sustainable design and building energy efficiency goals? The LEED Energy and Atmosphere Prerequisites and Credits include: commissioning, energy performance, ozone depletion, renewable energy use, and measurement and verification. Other credits with a potential impact on the building’s overall energy efficiency include: site selection, landscape design, ventilation effectiveness, indoor pollutant source control, controllability of systems, thermal comfort, and daylighting techniques. Learn how to use these credits to optimize energy performance in sustainably designed buildings.

**Presenters:** Cheryl O’Brien, Idaho National Engineering and Environmental Laboratory; Mike Thompson, TRANE

**Tuesday, Session 4**  
8:30 a.m. - 10:00 a.m.

## Fact and Fiction of Sustainability Costs and Benefits



**Intent:** To highlight the costs and benefits identified by organizations that have committed to sustainable design.

**Description:** Sustainable design and development involves the balance of economic, environmental and social considerations, but keeping that balance throughout the life of a facility can be a major challenge. Sustainable design principles have been applied to many buildings, resulting in reduced operating costs, reduced energy consumption, reduced environmental impact and increased worker productivity. Federal agencies have made a commitment to incorporating sustainable design into their new facility designs but have encountered numerous hurdles along the way. Learn how others have jumped those hurdles and about the data available to help you, so that sustainable design principles can be included in your projects.

**Presenters:** Vivian Loftness, Carnegie Mellon University; Don Horn, General Services Administration; Tom Paladino, Paladino & Co.

*Continued*

## Sustainability: Strategies for Success (continued)

**Tuesday, Session 5**  
10:30 a.m. - 12:00 p.m.

### The H<sub>2</sub>O Show



**Intent:** To share techniques that have worked across the federal sector to reduce water use.

**Description:** Water is a precious natural resource that site and building professionals are considering in their designs with greater frequency. Sound water management requires planning to ensure it is positively affecting daily operations and that water efficiency practices are being implemented. Now that achieving a certain LEED® rating is frequently required or encouraged in new facility design, you may need to understand how to maximize the credits you can get for your water conservation strategies. A case study will be shared to demonstrate how applying the “best available technology” is one of the key strategies to reducing water use.

**Presenters:** Frank Miyagawa, CH2MHill; Michael Laurie, Watershed LLC; Lee Merrill, Department of the Navy

**Tuesday, Session 6**  
2:00 p.m. - 3:30 p.m.

### Tool Time



**Intent:** To demonstrate the strengths of the commonly used tools for sustainable design and operations.

**Description:** There are many tools available to assist with the design, construction, and operations of buildings. There are many new tools, as well as those that have lasted the test of time. Several especially useful tools will be discussed and demonstrated, including the Whole Building Design Guide; the Department of Energy Federal Energy Management Program’s High Performance Buildings database; and the Environmental Protection Agency’s “Green” building specifications. You will leave with an understanding of the intent of these tools, key features, and how to use them to improve the quality of your next sustainable design project.

**Presenters:** Earle Kennett, National Institute of Building Sciences; Sara Farrar-Nagy, National Renewable Energy Laboratory; Alison Kinn Bennett, U.S. Environmental Protection Agency

**Tuesday, Session 7**  
4:00 p.m. - 5:00 p.m.

### Having It All – A Sustainable Business and Building



**Intent:** To experience how having sustainability principles as part of your philosophy impacts design and operation.

**Description:** If you are working in a sustainably designed building, does that mean you are working in an organization that has embraced the principles of sustainability? Or vice versa, if you are working in an organization subscribing to sustainability principles, does that mean you are working in a sustainably designed and operated building? What would it be like to have both? Some organizations have mastered “walking the talk.” Come hear one organization share how sustainability has been integrated into their organizational philosophy, products and facilities. Learn how having sustainability fully integrated into an organization changes the strategies employed for increasing energy efficiency and water conservation.

**Presenter:** Mark Yamauchi, Toyota Motor Sales

**Wednesday, Session 8**  
8:30 a.m. - 10:00 a.m.

### Selling Sustainability to Your Roadblocks



**Intent:** To address techniques to overcome common roadblocks to sustainable design.

**Description:** The State of California and the U.S. Navy have made strong commitments to incorporate sustainable design into all of their new buildings. Along the way they have overcome many barriers. One barrier to widespread adoption of sustainable design is the lack of actual, measured performance information from currently operating sustainably designed buildings. Another roadblock includes defining what sustainable design means, given that these organizations are responsible for such diverse building types. Other roadblocks include management commitment, teaming with the energy efficiency professionals, and the need to develop policy statements that can be used and understood in the field. Come learn techniques that can turn your roadblock into distant memories.

**Presenters:** Dan Burgoyne, State of California; Dennis Talton, Department of the Navy

**Wednesday, Session 9**  
**10:30 a.m. - 12:00 p.m.**

## **Design Integration – How to Make it Happen!**



**Intent:** To teach how to maximize project integration through a “greening charrette.”

**Description:** Your organization has a new building in the planning stage and you’ve been asked to assist by participating in an integrated project charrette. Questions leap to mind: Just what is an “integrated project charrette?” What will happen and what will they expect me to do? How will it benefit the project and the project design team? Why was I invited? To answer these questions and encourage effective participation, you will be led through a mock integrated project charrette. The importance of an effective charrette and the knowledge to effectively lead or participate in charrettes will be shared. Novices will learn how to contribute to a charrette and experienced designers will learn tips and tricks that will improve the quality and effectiveness of their participation.

**Presenters:** Gail Lindsey, Design Harmony, Inc.; Greg Franta, ENSAR Group, Inc.

**“The speakers were well informed and prepared, and offered useful information.”**

*George Benda,  
Chelsea Group, Ltd.*



## Additional Training Opportunities: Pre-Workshop

**Monday, August 8 through Friday, August 12**  
8:30 a.m. - 5:00 p.m.

### Comprehensive Five-Day Certified Energy Manager (CEM) Training Program

The Association of Energy Engineers (AEE) will sponsor its special in-depth five-day seminar, ideal for professionals who seek a more detailed program of instruction covering the technical, economic and regulatory aspects of effective energy management. The program provides detailed coverage of all of the six training areas specified for energy managers in the Energy Policy Act, and offers a comprehensive learning and problem-solving forum for those who want a broader understanding of the latest energy cost reduction techniques and strategies. This five-day course is an excellent “refresher” program for those preparing to take the Certified Energy Manager (CEM) exam. The CEM exam will be given on Friday afternoon, August 12 at the conclusion of the course (3.6 CEU/36 PDH).

**Instructors:** Dr. Barney L. Capehart, is a professor emeritus of industrial and systems engineering at the University of Florida; Dr. Wayne C. Turner, is a regents professor in the School of Industrial Engineering and Management at Oklahoma State University.

**Fees:** \$1,195\* for the course. (Registering for the course does not automatically register you to take the CEM exam.) Certification application and examination: \$200.

**To register:** For registration and the complete course outline visit: <http://www.aeecenter.org/seminars>.

**For more information:** To receive your CEM application form or further information on the CEM program, contact: Elaine Berkheimer, AEE, 4025 Pleasantdale Rd., Suite 420, Atlanta, GA 30340; phone: (770) 447-5083, ext. 218, or visit [www.aeecenter.org/certification/cem](http://www.aeecenter.org/certification/cem) (this page also includes a downloadable copy of the CEM application form).

*\*Represents a reduced fee for Energy 2005.*

**Wednesday, August 10 through Friday, August 12**  
9:00 a.m. - 5:00 p.m. - Wednesday  
8:00 a.m. - 4:30 p.m. - Thursday  
8:00 a.m. - 5:00 p.m. - Friday

### The Association of Energy Engineers (AEE) Fundamentals of Measurement and Verification: Applying the IPMVP

This course is designed in part to provide a useful preparatory vehicle for AEE’s **Certified Measurement and Verification Professional (CMVP)** program. Proven energy savings are now playing a significant role in financing energy management programs, and are emerging as the basis for some emission trades. While interest in savings data is growing, the state of the art in determining savings has also been rapidly evolving. This seminar will examine current methods of measuring and verifying savings, specifically reviewing the International Performance Measurement & Verification Protocol (IPMVP). Attendees will learn the process of designing a proper M&V program for their projects, including cost/accuracy tradeoffs, baseline adjustments, the role of stipulations, maintaining space conditions, the role of verifiers, and the data needed for emission trading. Examples of specific techniques will be presented, along with common pitfalls that can result in unreliable data. The Certified Measurement and Verification Professional (CMVP) exam will be given on Friday afternoon, August 12 (2.0 CEU/20 PDH).

**Instructors:** John D. Cowan, P.Eng., M.B.A., president of Environmental Interface Limited, has served as co-chair of the IPMVP Technical Committee; Steve Sain, P.E., C.E.M., C.M.V.P, C.E.P., Sain Engineering, Inc. brings to this program more than twenty years of experience in the energy conservation industry, including involvement in numerous energy conservation and alternative financing projects, especially involving U.S. federal agencies.

**Fees:** Course only: \$1,050 for government, non-profit and AEE members; \$1,150 for non-members. (Registering for the course does not automatically register you to take the CMVP exam.) Certification application and examination: \$400.

**To register:** For registration and to review the course outline visit : <http://www.aeecenter.org/seminars>

**For more information:** Prior to taking the CMVP exam, you must submit your completed CMVP application, along with a \$400 application fee. To receive your CMVP certification application and further information, contact: Certification Administrator, AEE, 4025 Pleasantdale Road, Suite 420, Atlanta, GA 30340; phone: (770) 447-5083, ext. 223; or visit [www.aeecenter.org/certification/cmvp](http://www.aeecenter.org/certification/cmvp).

**Saturday, August 13**  
**8:30 a.m. - 5:00 p.m.**

## **Green Roofs Design 101 – Introductory Course**

With the increasing use of the USGBC's LEED® as a procurement standard by many governments and the introduction of a new LEED rating systems for retrofit buildings, green roof infrastructure promises to play an ever increasing role in achieving LEED credits for high performance buildings—delivering benefits at the development site, operation of the building and in the broader community.

At this one-day intensive introductory course, you will learn how to determine major functions and components of a green roof, identify the factors that influence costs, how to utilize an integrated design process in your project for maximum benefit and much more.

Each attendee will receive the following:

- Participant's manual and course completion certificate
- Continental breakfast and lunch
- Complimentary one year GRHC individual membership in 2005 that includes:
  - o 50% discount on purchase of Conference CDs, which contain over 50 technical papers on policy, design and research (\$50 US value)
  - o Conference member registration fee (\$100 US discount off regular registration fee) for the Annual Conference, Awards and Trade Show
  - o Two line description on the searchable on-line membership database including contact information and member profile of participation in previous conferences, workshops and training courses
  - o Membership listing on our Members Directory in our Conference CD-ROM
  - o Bi-monthly electronic newsletter on green roof developments
  - o One Semi-annual hardcopy (or electronic version) of the Green Roof Infrastructure Monitor™ mailed to you

**Fee:** \$275\* per participant.

**For more information or to register:** Visit [www.greenroofs.org](http://www.greenroofs.org) - "What's New."

*\*Represents a reduced fee for Energy 2005.*

**Saturday, August 13**  
**1:00 p.m. - 5:00 p.m.**

## **Cost Effective Commercial and Industrial Solar Applications**

A "how to do it" presentation designed to assist Federal Energy and Facility Managers in developing, evaluating and implementing successful, cost effective sustainable designs with renewable energy systems at government (or C & I) installations. Applications presented will include active and passive solar applications, solar electric and geothermal systems for commercial water, pool and industrial process heating (water and air), and photovoltaic (PV) applications.

The course addresses the technical and economic issues required for the development, design, acquisition, installation, construction and commissioning of renewable energy projects and sustainable buildings. Conceptual designs of a variety of commercial solar water heating and photovoltaic applications will be developed to enable participants to evaluate the feasibility of potential projects and size systems, and determine appropriate hardware, system types, component sizes and configurations required to maximize performance, value and longevity of the various solar applications.

Procurement and implementation options, resources and references will be discussed using case studies of solar applications implemented at government facilities using the GSA Schedule, government contractors, bids, request for proposals, or alternative financing to compare and contrast alternative implementation strategies and other techniques that can be effectively used in implementing successful projects for governmental installations. The application of successful solar water heating and photovoltaic systems at government sites including an office building (DOS), a recreational (NPS) site, and a DOD installation, and others will be presented for evaluation and discussion.

**Instructor:** Henry M. Healey, PE, General Contractor and Educator with extensive experience in solar education and training, and the development, design, construction, installation, commissioning, operation and maintenance of commercial and industrial solar systems.

**Fee:** \$150\* per person.

**For more information or to register:** Contact Cecelia at [cecelia@flaenergy.com](mailto:cecelia@flaenergy.com) or (321) 452-2173, or [www.flenergy.com](http://www.flenergy.com)

*\*Represents a reduced fee for Energy 2005.*

**Continued**

## Additional Training Opportunities: Pre-Workshop (continued)

**Sunday, August 14**  
**8:00 a.m. - 5:00 p.m.**

### Building Commissioning - 101

Building commissioning is not an event. It is a process. A fully developed, properly executed building commissioning program is the owner's quality assurance program for the project, which begins with the pre-design phase and continues through design, construction, acceptance, turn-over to operations, and the warranty period. The benefits of building commissioning include such things as, improved building occupant productivity, lower utility bills through energy savings, increased occupant and owner satisfaction, and enhanced environmental/health conditions and occupant comfort. This one-day Building Commissioning workshop will provide an introduction to the basics of the commissioning process, and give an in-depth understanding of the roles of the owner, A/E, contractor, and Commissioning provider in the process.

**Fees:** \$325 if you register before June 10, 2005, and \$375 thereafter.

**For more information or to register:** Contact the Building Commissioning Association at Phone: (415) 774-6909, Fax: (425) 771-9588, or <http://www.bcxa.org/events/index.shtm>

**Sunday, August 14**  
**2:00 p.m. - 4:00 p.m.**

### HUD's Energy Action Plan – Energy Efficient Homes for the 21st Century

This roundtable session is hosted by the U.S. Department of Housing and Urban Development (HUD) and provides participants with an overview of the HUD Energy Action Plan including the following topics:

- Performance contracting
- Energy Efficient Mortgages – How to take advantage of them
- New strategies for energy-efficient residential construction for new and rehabilitated homes

**Presenters:** William F. Bolton, Los Angeles Multifamily Director, HUD; Wayne Waite, Regional Energy Representative, HUD

**Fee:** No charge.

**For more information or to register:** Contact Paula Antonovich at (703) 838-0093 Ext. 100, or [HUDEnergy@daitech.com](mailto:HUDEnergy@daitech.com).

**Sunday, August 14**  
**8:00 a.m. - 4:30 p.m.**

### DOE BestPractices Steam End User Training

This training is the first in a series of popular courses offered by DOE's BestPractices Steam initiative. BestPractices Steam End User Training covers the operation of typical steam systems and discusses methods of system efficiency improvement. The training is conducted by a DOE-Qualified Steam Instructor and is designed for end users – at the energy manager, steam system supervisor, engineer, and operations level – who have steam system responsibilities in industrial and institutional plants. The course is divided into three major categories:

- Steam Generation Efficiency,
- Resource Utilization Effectiveness, and
- Steam Distribution System Losses.

The agenda will cover BestPractices Steam publications such as the Steam System Survey Guide and software including the Steam System Scoping Tool (SSST), the Steam System Assessment Tool (SSAT), and the 3E-Plus insulation appraiser. Trainees should download a copy of the Steam System Scoping Tool and run the software for their facility before attending the class. The Steam System Survey Guide (reference document for course), software, and other materials are available from the BestPractices Steam website at: [http://www.oit.doe.gov/bestpractices/training/steam\\_training\\_sessions.shtml](http://www.oit.doe.gov/bestpractices/training/steam_training_sessions.shtml).

**Instructor:** Richard Jendrucko, DOE Steam BestPractices Qualified Instructor, University of Tennessee

**Fees:** No fee, but seating is limited to 30 participants.

**For more information or to register:** Contact Linda Stansberry at (865) 574-0266, or email at [stansberryl@ornl.gov](mailto:stansberryl@ornl.gov).

**Sunday, August 14**  
**2:00 p.m. - 4:00 p.m.**

### How to do Business with the Federal Government

Experts from the GSA Federal Supply Service and the Office of Small Business Utilization will provide you with an overview of the Federal Procurement Process and describe how you can become a Federal Supply Schedule contractor. Please make time on Sunday afternoon to join us and bring your questions. Our procurement experts look forward to meeting you.

**Instructors:** Pamela Smith-Cressel, GSA Federal Supply Service, Pacific Rim Region, Office of Small Business Utilization, will lead. Bill Eason and Michele Tobin from GSA Federal Supply Service-Los Angeles will also contribute and answer questions.

**Fee:** No charge.

**To register:** None required.

## Additional Training Opportunities: Post-Workshop

**Wednesday, August 17**  
2:30 p.m. - 5:30 p.m.

### Energy Reliability and Security Workshop

Do you have concerns about the reliability, resiliency and quality of energy in your facility? Do you worry that you are going to lose power at a critical time and that your backup system will fail when you need it? Is energy quality an issue for you and your critical functions? Are you concerned that a saboteur could cripple your energy delivery systems at a critical time in your operations and negatively affect your mission? Are you thinking that you might want to contact an expert to review the situation but don't know whom to call?

If you have any of these questions, then this workshop is for you! This three-hour workshop will cover the basic concepts of energy reliability, quality and security with an emphasis on federal facilities. Workshop topics will include:

- 1) How to assess your critical energy needs and how to determine if you should have a professional evaluation.
- 2) What resources are available?
- 3) What to expect from a professional energy security/reliability evaluation.
- 4) What kinds of potential solutions are available?
- 5) What benefits might result.
- 6) What all of this might cost.

Attendees will take away information that can help in applying the principles that were presented. These materials will be in a form that can be applied by the facility owner.

**Instructors:** Staff from the Sandia National Laboratories and EYP Mission Critical Facilities

**Fee:** No charge.

**For more information or to register:** Contact Dave Menicucci at (505) 844-3077, or [dfmenic@sandia.gov](mailto:dfmenic@sandia.gov)

**Wednesday, August 17 through Friday, August 19**  
2:30 p.m. - 5:00 p.m. - Wednesday  
8:00 a.m. - 5:00 p.m. - Thursday  
8:00 a.m. - 12:00 p.m. - Friday

### Design Strategies for Low-Energy, Sustainable, Secure Buildings

Federal buildings pose a unique design challenge with the need of incorporating security, sustainability, and safety requirements. How buildings use energy plays a critical role in integrating these three complex needs. The course teaches the fundamentals of an integrated "whole building" approach to design that considers the structure and systems as a whole and examines how they work best together to save energy and reduce environmental impact. Participants learn about building durability and security in concert with sustainability, "zero-energy" buildings, green power, renewable energy technologies and distributed generation. The topics apply to new buildings and retrofits for all federal building types: office buildings, border stations, residences/barracks, visitor centers, courthouses, warehouses, prisons, etc.

Topics include daylighting, natural ventilation, passive solar heating, energy-efficient lighting/systems/materials, building integrated photovoltaics, HVAC control strategies, procurement of cost-effective design and consulting services, and project financing options. The curriculum is designed to help participants gain a more thorough understanding of water conservation, low-VOC building materials, indoor environmental quality, and site planning and design issues. Instructors demonstrate some of the latest energy-efficient design software - ENERGY-10 (Version 2.0), review the Internet-based Whole Building Design Guide, and discuss the U.S. Green Building Council's LEED® Rating System, as well as the ENERGY STAR® label for buildings.

Attendees are eligible for 13 AIA CES Learning Units and AEE Certified Energy Manager CEUs.

**Instructors:** Joe Bourg, Millennium Energy; Robert Koester, Ball State University; Malcolm Lewis, CTG Energetics; and Richard Paradis, Sustainable Buildings Industry Council

**Fees:** \$225 for non-federal attendees; free for federal attendees.

**For more information or to register:** Contact Richard Paradis at SBIC, (202) 628-7400 Ext. 201.

*Continued*

## Additional Training Opportunities: Post-Workshop (continued)

**Thursday, August 18**  
**8:30 a.m. - 12:00 p.m.**

### Enhanced Automation and Demand Reduction

Enhanced automation offers strategies to increase the capability of existing energy and building management systems to control current, and plan for future, building energy costs while maintaining the comfort and productivity of building occupants.

This half-day workshop introduces technologies to help energy managers and facilities engineers better manage their energy use, reduce electrical demand, and maintain or even improve the comfort of building occupants. Topics covered include how to screen buildings to assess enhanced automation (EA) potential, lighting and HVAC technologies and control strategies, energy management and information systems, as well as EA implementation strategies. Upon completion, participants will have an understanding the complexities of enhanced automation and the role of the facilities engineering group in making EA really work in facilities. Information on demand response programs offered by California utilities will be provided. In addition, results of a coordinated pilot test of demand response from multiple commercial and institutional building sites in California will be presented. Attendees will receive 3.0 continuing education hours towards renewal of BOC certification, and for self-certification with recognized credentials through AEE, IFMA, BOMA, AFE, and AIA.

Presented by the Northwest Energy Efficiency Council's Building Operator Certification program in sponsorship with PG&E, Edison, San Diego Gas & Electric, and Southern California Gas Company.

**Instructors:** David Wylie, ASW Engineering; Mary Ann Piette, Lawrence Berkeley National Laboratory

**Fees:** \$199 per attendee (\$150 for second person or more from same organization); \$150 for federal attendees (\$125 for second of more from same federal agency)

**To register:** Please go to the BOC website:  
<http://www.theBOC.info>

**For more information:** Contact the Northwest Energy Efficiency Council at (206) 292-4793 Ext. 2 (registration questions), (206) 292-4125 fax, or [admin@theBOC.info](mailto:admin@theBOC.info).

**Thursday, August 18**  
**8:30 a.m. - 3:30 p.m.**

### Ensuring Technical Quality in Super ESPC Project

How do agencies manage risk and assure long-term performance under FEMP's Super energy savings performance contract? Want to make sure your guaranteed savings are achieved down the road? This workshop will clarify the roles measurement and verification (M&V) and commissioning (Cx) play in federal energy savings projects, specifically focusing on FEMP's Super ESPC contract.

We will begin with an overview of the requirements for M&V and Cx in Super ESPC projects. Examination of FEMP's Risk/Responsibility Matrix will demonstrate how M&V can be used to manage performance risks. Attendees will learn the basic methodologies used in M&V as described in FEMP M&V Guidelines.

We will discuss strategies for selecting appropriate M&V methodologies, including how to use stipulated values in the right way. The format and content of M&V plans will be covered, including what to look for in their review. In addition, requirements in the Super ESPC for commissioning activities and periodic performance reports will be reviewed. We will present related tools and resources available through FEMP, and evaluate an example M&V plan from the agency's point of view.

**Instructors:** Satish Kumar, Ph.D., Lawrence Berkeley National Laboratory; Lia Webster, P.E., Nexant Inc.; Dale Sartor, P.E., Lawrence Berkeley National Laboratory

**Fee:** No charge, but advanced registration is requested.

**To register:** Contact Satish Kumar at [Skumar@lbl.gov](mailto:Skumar@lbl.gov) and provide your name, organization, contact information including email and phone number.

**For more information:** Visit:  
<http://www.dc.lbl.gov/mv/E2005-workshop.html>.

**Thursday, August 18**  
**8:30 a.m. - 4:00 p.m.**

## **Strategic Energy Planning**

Would you like to raise the visibility of energy within your entire organization? ...Are you an energy professional? ...Do you have the responsibility to develop an “Energy Plan” for your organization? ...Do you wonder where to start? ...Would you like some help putting a framework around your job responsibilities? ...Can you demonstrate the impact of your efforts on your organization’s bottom line? If your answer to any of these questions is “yes,” then this 6-hour hands-on workshop is for you!

The objective of this workshop is to introduce you to a process for developing a “Strategic Energy Plan” for your organization using a unique methodology and proven techniques. This intensive workshop is specially designed for energy managers and other facility professionals whose responsibilities include developing and implementing a comprehensive energy management program for their organizations. Recognizing that a successful program must integrate energy planning with other critical planning activities, this program takes you step by step through the areas vital to your plan’s success. You will be able to network with your peers, sharing successes and lessons learned. This workshop will solidify your position as the trusted energy expert within your organization!

What will be discussed during the workshop?

- The value of planning strategically for your energy use
- Elements of a successful plan
- How processes, programs, and projects integrate into a Strategic Energy Plan
- Where to benchmark your results against others
- How to communicate the value of your program across the entire organization

**Fee:** \$295 per participant.

**To register:** Contact Jennifer Freeman at 404-894-4904, 404-894-1192 (fax), or [Jennifer.freeman@edi.gatech.edu](mailto:Jennifer.freeman@edi.gatech.edu)

**Thursday, August 18**  
**8:30 a.m. - 5:00 p.m.**

## **LEED®-EB Technical Review**

This full-day session for building owners, facility managers and design teams will cover the technical requirements and processes for achieving certification under the LEED for the Existing Buildings Rating System. This session will address strategies to advance existing buildings to a sustainable level of operation, upgrade and reduce building operating costs, solve building operation problems, improve indoor environment, and support higher productivity of building occupants.

**Instructors:** Two members of the United State Green Building Council (USGBC) LEED Faculty

**Fees:** \$325 for USGBC members; \$425 for non-members, before August 11, 2005, after that date \$355 for USGBC members; \$475 for non-members, on or after 8/11/05.

**For more information or to register:** Visit [www.usgbc.org](http://www.usgbc.org) or contact USGBC staff at [workshop@usgbc.org](mailto:workshop@usgbc.org). Please note that registration for this workshop will not be available until May 2005.

*Continued*

## Additional Training Opportunities: Post-Workshop (continued)

**Thursday, August 18**  
**8:30 a.m. - 5:00 p.m.**

### LEED®-NC Technical Review

This full-day session is for building owners, facility managers, design teams and any building industry stakeholder interested in projects that provide high performance “green” techniques in an environmentally sensitive and economical package. The workshop will cover the technical requirements of the LEED Green Building Rating System for New Construction & Major Renovations (LEED-NC) and provide an overview of the knowledge needed for taking the LEED Accreditation exam. This session will provide attendees with an understanding of how LEED is being used nationally to define various levels of green project design, the resources available for pursuing LEED projects, and a credit-by-credit review of the LEED Green Building Rating System.

**Instructors:** Two members of the USGBC LEED Faculty

**Fees:** \$325 for USGBC members; \$425 for non-members, before August 11, 2005, after that date \$355 for USGBC members; \$475 for non-members, on or after August 11, 2005.

**For more information or to register:** Visit [www.usgbc.org](http://www.usgbc.org) or contact USGBC staff at [workshop@usgbc.org](mailto:workshop@usgbc.org). Please note that registration for this workshop will not be available until May 2005.



### PRE-EVENT TECHNICAL TOURS

#### *Sunday, August 14*

Complete details on each of these tours are available on the workshop website ([www.energy2005.ee.doe.gov](http://www.energy2005.ee.doe.gov)).

Tours have minimum and maximum registration requirements and space is limited. Tour details are subject to change, so check the website for current information. You can register for the tours by sending in a completed registration form (see page 41) or by using the secure online registration form.

#### *Tour No. 1*

### GSA PV Array in Downtown Los Angeles

**Time:** 1:30 p.m. - 4:30 p.m.

**Cost:** \$20

“Who said you can’t teach an old building new tricks?” One of the oldest facilities in the GSA property portfolio, the 300 South Los Angeles Street building, a 45 year old facility is now home to the GSA largest solar installation. The GSA purchased 231 kW of solar power with an investment payback expected within 3 ½ years. The accelerated investment recovery was made possible by participating in two State of California renewable energy and peak load reduction incentive programs.

The 2,051 Shell Solar modules and the TRACE inverter was installed and supported by the PowerLight Corporation. The array has provided affordable and reliable onsite renewable distributed energy power for managing the building’s peak load demand driven by its tenants’ use of air conditioning, lighting and increased “plug load.” By generating onsite renewable power to reduce its peak load demand, the federal government has reduced its energy demand on constrained peak period supply and deliverability while improving reliability and power quality. The GSA’s proactive solar program demonstrates its willingness to act and be a key participant with its local utility, the Los Angeles Dept. of Water & Power and their renewable portfolio standard program.

#### *Tour No. 2*

### City of Los Angeles DFC300A Fuel Cell Power Plant at JFB Headquarters Building

**Start Time:** 9:30 a.m.

**Cost:** \$20

All fuel cells electrochemically react hydrogen to create electricity. Unlike low-temperature fuel cell technologies that operate on pure hydrogen, Direct Fuel Cells can generate electricity from a hydrocarbon fuel, such as natural gas (or anaerobic digester gas, a renewable fuel, from this particular unit) by reforming the fuel inside the fuel cell to create hydrogen. The only by-products of the electrical production are water, significantly reduced amounts of carbon dioxide and negligible amounts of other emissions. As evidenced by this application, fuel cells are ideal resources for power constrained urban areas where emissions, noise and reliability are important factors. Other units are operating at hospitals, university campuses, hotels, municipal wastewater treatment facilities, breweries, and data processing centers.

The Los Angeles Area benefits from the DFC300A Fuel Cell Power Plant by realizing the following:

- **Ultra-low emissions** – The significantly lower emissions from a DFC300A power plant is the equivalent to any of the following:
  - o Eliminating 118 cars from the road
  - o Planting 161 acres of trees
  - o Eliminating the power consumption of 250 homes
- **High fuel efficiency** – uses **50 percent less fuel per kilowatt-hour of electricity** than conventional power plants.
- **Quiet operation** – at 65 decibels within 10 feet, **sound levels are comparable to a commercial air conditioning unit.**

*Continued*

## Optional Technical Tours (continued)

### **Tour No. 3**

#### **City of Long Beach's Southeast Resource Recovery Facility**

**Start Time:** 1:30 p.m.

**Cost:** \$20

SERRF, the Southeast Resource Recovery Facility, in the City of Long Beach, California processes solid waste through one of three boilers and performs “front-end” and “back-end” recycling by recovering white goods prior to incineration and collection metals removed from the boilers after incineration. Each month, an average of 825 tons of metal are recycled rather than sent to a landfill, along with 17,000 lbs. of narcotics, that they perform as a public service for the law enforcement agencies of California.

The tour will take you from the Tipping Hall, where trucks discharge their refuse loads, to the Dry Scrubber, which neutralizes acid gases such as sulfur dioxide and hydrochloric acid from the resultant ash, to the turbine-generator, where steam generated from burning the refuse is used to produce electricity for the facility. There will also be time for questions at the end of the tour. Reference: [www.ci.long-beach.ca.us](http://www.ci.long-beach.ca.us).



**With nearly 6 miles of sandy beaches, year round sunshine, and great ocean breezes, Long Beach has much to offer and even more to do!**



Step back in time aboard the majestic *Queen Mary*, which has graced this oceanfront city since 1967. “The grandest ocean liner ever built” was hostess to the rich and famous during the 1930s and considered by many as the only civilized way to travel. World War II saw the *Queen Mary*’s conversion to a troop ship know as the Grey Ghost, carrying up to 15,000 troops at one time. She later carried more than 22,000 war brides and children to the United States and Canada. Now restored to her full glory, the *Queen Mary* offers a rare opportunity experience a bygone era.

The renowned Aquarium of the Pacific offers a unique opportunity to take a journey of discovery through the world’s largest ocean. Meet more than 12,500 animals as you explore sunny Southern California and Baja, the frigid waters of the North Pacific, and the colorful reefs of the Tropical Pacific.



Downtown Long Beach features a perfect blend of beach community with sophisticated urban energy. Whether it’s walking down the shore to enjoy dinner at a waterfront restaurant or exploring the East Village and it’s impressive collection of art, you’re certain to be enamored by Southern California’s most engaging downtown. Pine Avenue and Belmont Shore’s Second Street in particular offer a variety of restaurants and shopping.

Culture and history abound at the Long Beach Museum of Art, the Museum of Latin American Art, and the East Village Arts District. The Long Beach Symphony, historic Rancho Los Alamitos and the Terrace and Center Theaters host world class performing arts events.



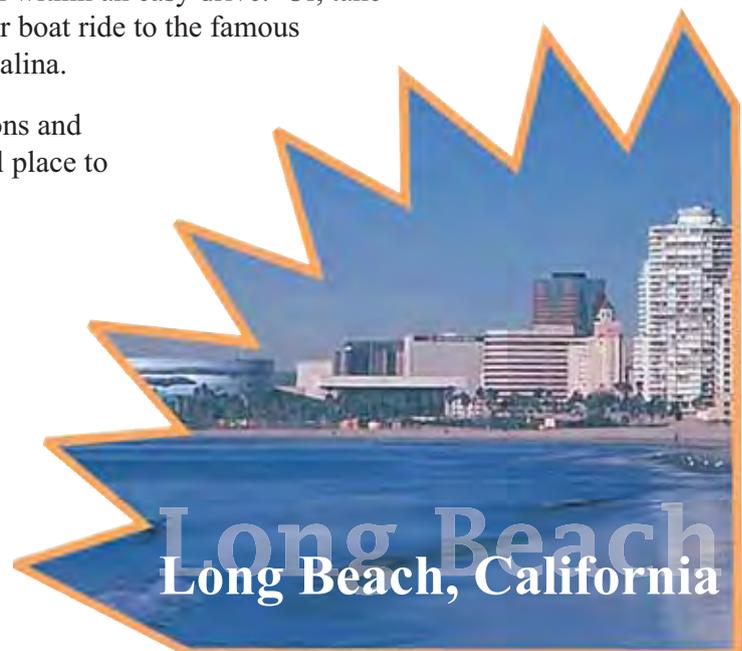
Getting around couldn’t be easier! Fast, frequent, and free Passport shuttles run throughout downtown Long Beach with stops at the Convention Center, hotels, restaurants, and attractions.

Venturing inland from the oceanfront, Disneyland, Universal Studios, and Hollywood are all within an easy drive. Or, take a high speed, one hour boat ride to the famous getaway island of Catalina.

So, whatever your plans, Long Beach’s attractions and centralized oceanfront location make it the ideal place to stay!



Visit the Long Beach Convention and Visitor’s Bureau website ([www.visitlongbeach.com](http://www.visitlongbeach.com)) to find out more about the many area attractions.



### Air

Long Beach is served by the Long Beach Municipal Airport, the Los Angeles International Airport (LAX), the John Wayne (Orange County) Airport, and the Ontario International Airport. Long Beach Airport is just 8 miles away, LAX is 18 miles north of Long Beach, Orange County is 25 miles south, and Ontario International Airport is 35 miles east.

For the private sector, American Airlines offers 5% off most fares for air travel to and from this event. Attendees can fly into Long Beach Airport, Los Angeles International, Burbank, Ontario International, or John Wayne Airport in Orange County. For reservations and ticketing information, call American Airlines Meeting Services Desk, or have your travel professional call 1-800-433-1790 from anywhere in the United States or Canada, seven days a week, from 5:00 a.m. to 12:00 midnight (Central Time), and reference STARfile number **S4785AJ**. Reservations for the hearing and speech impaired are also available 24 hours a day, seven days a week, at 1-800-543-1586. Jet Blue airlines flies direct from coast to coast into Long Beach Airport.

### Air/Ground Transportation

Shuttle service is available to all three hotels.

Express Shuttle (Long Beach Municipal Airport)  
\$11 per person

Express Shuttle (Los Angeles International Airport)  
\$15 per person

Express Shuttle (Orange County Airport)  
\$50.00 first person; \$10.00 per additional person

Express Shuttle (Ontario International)  
\$34 first person; \$10 per additional person

### Hotels

Take advantage of reduced rates by making your reservations online through the dedicated links available at [www.energy2005.ee.doe.gov](http://www.energy2005.ee.doe.gov), or identify “Energy 2005” when making reservations at the following hotels:

#### **Hyatt Regency Long Beach**

888-591-1234 or 562-491-1234

Fax: 562-983-1491

[www.hyatt.com](http://www.hyatt.com)

#### **Renaissance Long Beach Hotel**

800-468-3571 or 562-437-5900

Fax: 562-499-2509

[www.renaissancehotels.com](http://www.renaissancehotels.com)

#### **The Westin Long Beach**

888-625-5144 or 562-436-3000

Fax: 562-436-9176

[www.starwoodhotels.com/westin](http://www.starwoodhotels.com/westin)

## Networking Events

**Tuesday, August 16**  
**5:30 p.m. - 7:00 p.m.**

### Networking Event

Make The Connection – Tuesday evening is a free night so come “make the connection” with friends, colleagues and customers before you go out on the town to enjoy all that the waterfront and downtown Long Beach have to offer. We’re taking it outside to enjoy Long Beach’s scenic waterfront and ocean breezes. Wear your favorite beach attire and come and chill out at this Jimmy Buffet inspired event.

**Tuesday, August 16**  
**5:30 a.m.**

### Energy Fun Run/Walk

Energy to Burn! Come out and join us for a 5 mile Energy Fun Run/Walk on Tuesday morning, August 16th. Start the day out right and meet us at the Visitor’s Center at 5:30 a.m. for an energizing run along the beautiful Long Beach board walk. Not into running? Walkers are also welcome. Rob Tomiak and Dave Hunt will lead this event.

## PLUG INTO Networking Opportunities

**Sunday, August 14 - Wednesday, August 17**

### Networking Receptions

Sunday ..... 5:00 p.m. - 8:00 p.m.  
 Monday ..... 5 p.m. - 6:30 p.m.

### Opening Plenary

Monday ..... 8:30 a.m. - 10:00 a.m.

### Networking Breakfasts

Monday, Tuesday, and Wednesday ..... 7:30 a.m. - 8:30 a.m.

### Energy Fun Run/Walk

Tuesday ..... 5:30 a.m.

### Networking Event

Tuesday ..... 5:30 p.m. - 7:00 p.m.

### Closing Luncheon Plenary

Wednesday ..... 12:00 p.m. - 2:30 p.m.

### Exhibit Hall Open

Sunday ..... 5:00 p.m. - 8:00 p.m.  
 Monday ..... 10:00 a.m. - 6:00 p.m.  
 Tuesday ..... 7:30 a.m. - 2:00 p.m.

## How to Register

Please read this information before registering.

The registration form for workshop attendees is on the next page. Please use this form if you wish to mail or fax your registration. Note that the form is also available online for secure web registration ([www.energy2005.ee.doe.gov](http://www.energy2005.ee.doe.gov)). You will be sent a confirmation letter when your registration is received.

If your company is an exhibitor at Energy 2005, contact DOE Events at 800-608-7141 or 540-937-1739 or email: [energy2005@doeevents.com](mailto:energy2005@doeevents.com). If you are a speaker, contact your Track Lead for a speaker registration form and information on the speakers-only website.

All participants in Energy 2005 sessions, meal functions, social events, and other programs must be registered for the event. Only fully registered attendees will be allowed in the sessions. Tickets will be sold at the on-site registration table for guests wishing to attend meal functions, social events or tours. Passes will also be available at no charge for guests accompanying you to the receptions on a space-available basis.

### Registration Fees

Regular registration is \$565. There is an Early Registration rate of \$465 for registrations postmarked by June 10, 2005. There is also a team discount available for four or more workshop registrants from the same organization who register at the same time, postmarked by June 10, 2005. The team discount fee is \$420 per person. The one-day rate for attendees is \$365.

### Technical Tour Registration

Technical tours are listed on pages 35-36. Please note that these tours are optional and there is an additional \$20 fee for each tour. Check [www.energy2005.ee.doe.gov](http://www.energy2005.ee.doe.gov)

for updates. Tour tickets may be purchased separately from your registration, or you can sign up on-site if there is space available.

### Payment Information

Please make your check or purchase order payable to: "DOE-Energy 2005." All checks must be drawn on a U.S. bank.

### Wire Transfer or Electronic Funds Transfer

If your registration fee will be paid by wire transfer or electronic funds, please contact the Energy 2005 registration office at 800-608-7141 or 540-937-1739, or email: [energy2005@doeevents.com](mailto:energy2005@doeevents.com).

### Cancellation Policy

The registration fee, minus a \$50 service charge, will be refunded for written cancellations of registration and/or tours received prior to August 1, 2005. No refunds after that date. You may substitute attendees at any time by sending written notice of the change prior to August 1, 2005. After that date, please bring the information to the on-site registration table at the workshop. Send written notice of cancellation or changes by email to [energy2005@doeevents.com](mailto:energy2005@doeevents.com); by fax: 540-937-7848; or by mail to DOE-Energy 2005, c/o SAGE Systems Technologies, LLC, 10440 Balls Ford Road, Suite 200, Manassas, VA 20109. If you have any questions, call 800-608-7141 or 540-937-1739, or email: [energy2005@doeevents.com](mailto:energy2005@doeevents.com).

### Special Needs

We will make every effort to accommodate any special needs that you require. Please indicate these on your registration form. We will confirm receipt by return email.

**Mail or fax the completed registration form to:  
DOE-Energy 2005 c/o SAGE Systems Technologies, LLC  
10440 Balls Ford Road, Suite 200, Manassas, VA 20109 Fax: 703-365-0460**

*Please do not submit the registration form after August 1, 2005.  
If you are registering after that date, bring this form to the on-site registration table at Energy 2005.*

# Energy 2005, August 14-17, 2005, Long Beach, California

Please read the information on page 40 before filling out this form.

Please print clearly.

First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

Title: \_\_\_\_\_ Name on Badge: \_\_\_\_\_

Org. Type (select one):

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Architect/Engineering/Design Consultants         | <input type="checkbox"/> Energy Consulting/Auditing                          | <input type="checkbox"/> National Laboratory                       |
| <input type="checkbox"/> Associations/Societies                           | <input type="checkbox"/> Environmental Consulting/Recycling/Waste Management | <input type="checkbox"/> Power Marketing Association               |
| <input type="checkbox"/> Builder/Contractor/Developer                     | <input type="checkbox"/> Equipment Supplier/Installer                        | <input type="checkbox"/> Power Producer                            |
| <input type="checkbox"/> Building Facilities Management                   | <input type="checkbox"/> ESCO  | <input type="checkbox"/> R & D (Private, Non-Federal)              |
| <input type="checkbox"/> Civilian Agency                                  | <input type="checkbox"/> Finance/Banking/Insurance                           | <input type="checkbox"/> State, Local & Native American Government |
| <input type="checkbox"/> Congress & White House                           | <input type="checkbox"/> Foreign Government                                  | <input type="checkbox"/> Utility (Investor-Owned)                  |
| <input type="checkbox"/> Defense Agency                                   | <input type="checkbox"/> General/Miscellaneous                               | <input type="checkbox"/> Utility (Miscellaneous)                   |
| <input type="checkbox"/> Education: Higher Educ.                          | <input type="checkbox"/> Health Care   | <input type="checkbox"/> Utility (Municipal)                       |
| <input type="checkbox"/> Education: K-12 Inc. School Boards and Districts | <input type="checkbox"/> Lighting  | <input type="checkbox"/> Utility (Rural Electric Coop.)            |
|   | <input type="checkbox"/> Media   |  |

Agency/Organization/Company:

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Architect of the Capitol  | <input type="checkbox"/> Department of Health and Human Services     | <input type="checkbox"/> Department of Veteran Affairs        |
| <input type="checkbox"/> Department of Commerce  | <input type="checkbox"/> Department of Homeland Security             | <input type="checkbox"/> Environmental Protection Agency      |
| <input type="checkbox"/> Department of Defense - Air Force                               | <input type="checkbox"/> Department of Housing and Urban Development | <input type="checkbox"/> Federal Emergency Management Agency  |
| <input type="checkbox"/> Department of Defense - Army                                    | <input type="checkbox"/> Department of Interior                      | <input type="checkbox"/> Federal Energy Regulatory Commission |
| <input type="checkbox"/> Department of Defense - Marine Corps                            | <input type="checkbox"/> Department of Justice                       | <input type="checkbox"/> General Services Administration      |
| <input type="checkbox"/> Department of Defense - Navy                                    | <input type="checkbox"/> Department of Labor                         | <input type="checkbox"/> Office of Management and Budget      |
| <input type="checkbox"/> Department of Defense - Other                                   | <input type="checkbox"/> Department of State                         | <input type="checkbox"/> Small Business Administration        |
| <input type="checkbox"/> Department of Education   | <input type="checkbox"/> Department of the Treasury                  | <input type="checkbox"/> Social Security Administration       |
| <input type="checkbox"/> Department of Energy  | <input type="checkbox"/> Department of Transportation                | <input type="checkbox"/> U.S. Department of Agriculture       |
| <input type="checkbox"/> Department of Energy - National Lab (Please specify in "Other") |  | <input type="checkbox"/> U.S. Postal Service                  |

Other: \_\_\_\_\_

Site Name/Company line #2: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State/Province: \_\_\_\_\_ Zip/Postal Code: \_\_\_\_\_

Business Phone: ( ) \_\_\_\_\_ Fax: ( ) \_\_\_\_\_

Email Address: \_\_\_\_\_

Special Needs: \_\_\_\_\_

Comments: \_\_\_\_\_

Emergency Contact and Phone: \_\_\_\_\_

Do not share my information with third parties.

How did you hear about this workshop? (check all that apply):

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> At Energy 2004             | <input type="checkbox"/> Colleague/word-of-mouth | <input type="checkbox"/> Previous Attendee             |
| <input type="checkbox"/> Online ad/Calendar Listing | <input type="checkbox"/> Email                   | <input type="checkbox"/> Another conference/trade show |
| <input type="checkbox"/> Trade Publication/ad       | <input type="checkbox"/> Direct mail/flyer       | <input type="checkbox"/> Other: _____                  |

I plan to join the Tuesday morning Energy Fun Run/Walk

**Registration Fee: (select one)**

- |  |   |
|--|---|
| <input type="checkbox"/> Early Registration (postmarked by June 10, 2005)... \$465 | <input type="checkbox"/> Team Discount (postmarked by June 10, 2005)....\$420 ea.                   |
| <input type="checkbox"/> Regular Registration ..... \$565                          | <input type="checkbox"/> One-Day Registration.....\$365   |
|  | <input type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday |

Optional Technical Tours:  Tour #1 - \$20  Tour #2 - \$20  Tour #3 - \$20

**Method of Payment: (select one)**

Government Training Form  Company Purchase Order  Wire Transfer or Electronic Funds Transfer  Check

Credit Card:  American Express  VISA  MasterCard  Discover

Credit Card Number: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

TOTAL AMOUNT DUE: \$ \_\_\_\_\_

Mail or fax this form to:

DOE-ENERGY 2005 c/o SAGE Systems Technologies, LLC • 10440 Balls Ford Road, Suite 200, Manassas, VA 20109 • Fax: 703-365-0460



DOE-Energy 2005  
c/o SAGE Systems Technologies, LLC  
10440 Balls Ford Road, Suite 200  
Manassas, VA 20109

## We're Greening the Meeting in 2005!

With your help, Energy 2005 will leave the smallest possible environmental footprint in Long Beach and be remembered as a truly green meeting. Last year, more than half of our attendees registered online through our secure website in lieu of using paper forms. We hope to increase that percentage this year and save even more paper.

We selected a city that offers low-cost, frequent ground transportation between our hotels and the airport to preclude the need for renting single-occupant cars. We selected a convention center you can walk to from your hotel. We encouraged our hotels to utilize green housekeeping principles to the maximum extent possible. Examples include signage that encourages guests to re-use towels and permit housekeepers to change bed linens less often.

We use email to confirm registrations instead of wasteful paper mail-outs or faxes.

We've kept printed materials to a minimum. Rather than distributing paper copies of presentations, we post them on the website.

We encourage our exposition exhibitors to use a paperless system to track potential leads.

We require the convention center to minimize the use of disposable cups, plates and condiments and therefore reduce what winds up in the waste stream.

We do not set water glasses out at meals if we are already serving iced tea or other cold beverage. This saves energy and water normally used to wash and dry the glassware.

We carefully analyze past years' meal functions to better estimate food requirements. We then work in advance with the caterer to design a menu that minimizes food waste.

We request attendees to tell us — upon arrival — if they will be attending the closing luncheon, to better estimate our food requirements.

Please help us avoid wasteful duplicate mailings. If you receive more than one copy of this brochure, need to have your address corrected, or wish to be removed from our mailing list, please fax a note with the corrected version to (540) 937-7848.

Thank you.

### A Strong Energy Portfolio for a Strong America

Energy efficiency and clean, renewable energy will mean a stronger economy, a cleaner environment, and greater energy independence for America. Working with a wide array of state, community, industry, and university partners, the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy invests in a diverse portfolio of energy technologies.

### For more information contact:

EERE Information Center  
1-877-EERE-INF (1-877-337-3463)  
[www.eere.energy.gov](http://www.eere.energy.gov)